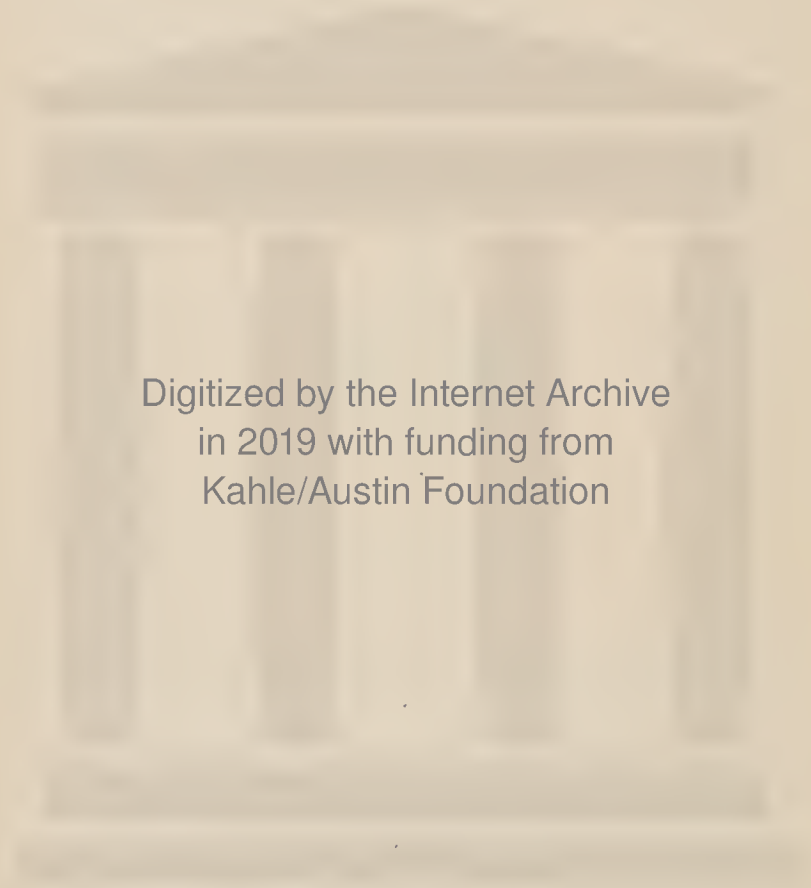
AMERICAN MONETARY *and* BANKING POLICIES

George W. Dowrie

Longmans' Economics Series

NUNC COGNOSCO EX PARTE

TRENT UNIVERSITY
LIBRARY



Digitized by the Internet Archive
in 2019 with funding from
Kahle/Austin Foundation

https://archive.org/details/americanmonetary0000dowr

AMERICAN MONETARY AND BANKING POLICIES

Longmans' Economics Series

General Editor

ERNEST L. BOGART

PROFESSOR OF ECONOMICS IN THE
UNIVERSITY OF ILLINOIS

Economic History of American Agriculture. *By* Ernest L. Bogart.

Readings in the Economic History of the United States. *By* Ernest L. Bogart *and* Charles M. Thompson, *University of Illinois.*

Modern Industry. *By* Ernest L. Bogart *and* Charles E. Landon, *Duke University.*

Money. *By* Frederick A. Bradford, *Lehigh University.*

Taxation in the Modern State. *By* Alzada Comstock, *Mount Holyoke College.*

Interpretive Accounting. *By* F. E. Folts *and* A. B. Stillman, *University of Oregon.*

American Monetary and Banking Policies. *By* George W. Dowrie, *Leland Stanford University.*

Index Numbers Elucidated. *By* Willford I. King, *New York University.*

IN PREPARATION

International Trade. *By* H. T. Collings, *University of Pennsylvania.*

Business Ethics. *By* A. D. Kaplan, *University of Denver.*

The Modern Railroad. *By* Julius A. Parmelee of Washington, D. C.

Money and Banking. *By* W. E. Spahr, *New York University.*

Industrial History of the United States. *By* Ernest L. Bogart.

Longmans' Economics Series

AMERICAN MONETARY AND BANKING POLICIES

BY

GEORGE WILLIAM DOWRIE

PROFESSOR OF FINANCE, GRADUATE SCHOOL OF BUSINESS
STANFORD UNIVERSITY

LONGMANS, GREEN AND CO.
NEW YORK · LONDON · TORONTO
1930

HG 1601 .D6

DOWRIE
AMERICAN MONETARY AND BANKING POLICIES

COPYRIGHT • 1930
BY LONGMANS, GREEN AND CO.
ALL RIGHTS RESERVED, INCLUDING THE
RIGHT TO REPRODUCE THIS BOOK, OR
ANY PORTION THEREOF, IN ANY FORM

FIRST EDITION

PRINTED IN THE UNITED STATES OF AMERICA

PREFACE

This book is the outgrowth of a conviction that in the junior-senior course in money and banking, emphasis should be placed upon public policy rather than upon mere descriptions of institutions on the one hand, or extensive explorations into the subtleties of monetary and credit theory on the other. Most upperclassmen have already acquired a working knowledge of the general structure and functions of our financial institutions, and are ready to consider more thoroughly some of the problems which had to be passed over somewhat superficially in discussions of money and banking in elementary courses in economics.

Whether the student places the emphasis upon the social or the business aspects of private finance, he should have a definite interest in the policies and tendencies which characterize our present financial organization. The management of banks and other financial undertakings is profoundly affected by prevailing standards and accepted practices. Likewise the conduct of corporations and other forms of business ventures will be greatly influenced by the general financial set-up in which they carry on their operations. Transcending any question of private gain, however, is the consideration of our national monetary and banking policies from the standpoint of their social desirability. In the discussion of existing policies, therefore, their relation to the public welfare will be regarded as the final test of their merit.

The topics selected for treatment are those which, in the author's judgment, are of most vital interest and concern

124003

to the American public. Some of them, from their very nature, have always been important and will probably continue to hold the public interest so long as the existing pecuniary structure lasts. Others, like the branch banking question, have quite suddenly assumed a very prominent place and are threatening to bring about profound changes in our financial structure.

On the whole, the plan followed has been (1) to trace briefly the roots of the policy or tendency in question, (2) to ascertain its real nature and status, and (3) to inquire into its actual or probable effect upon our economic structure. Our primary concern is with the problem as it exists in the United States, but foreign experience has been drawn upon freely wherever it seems to throw light upon our domestic situation.

The author wishes to acknowledge his especial indebtedness to two of his colleagues, Professor Murray S. Wildman, and Dr. Merrill K. Bennett, for a careful reading of the manuscript and for many valuable suggestions.

George William Dowrie

CONTENTS

CHAPTER		PAGE
I.	The Nature of Monetary and Banking Policy	1
II.	Policies Relating to the Banking Structure.	14
III.	Policies of Internal Management.....	50
IV.	Public Regulation of Banking.....	96
V.	The Central Banking Function in American Banking.....	134
VI.	The Reserve Banks and the Supply of Money and Credit.....	167
VII.	Policies Relating to the Service Functions of Central Banking.....	203
VIII.	Policies Relating to the Gold Standard....	230
IX.	Central Banking Policy and the Stabilization Problem.....	255
X.	Policies Relating to Our Circulation Money	285
XI.	Monetary and Banking Policy as Related to Special Groups.....	315
XII.	National Interrelationships in Monetary and Banking Policy.....	361
	Index.....	397

AMERICAN MONETARY
AND
BANKING POLICIES

AMERICAN MONETARY AND BANKING POLICIES

CHAPTER I

THE NATURE OF MONETARY AND BANKING POLICY

1. The Determining Factors in Monetary and Banking Policy

In the manufacture and distribution of our various articles of food, shelter, clothing, and countless other items which contribute to the satisfaction of our wants, our economic organization, on the whole, has achieved gratifying results with a minimum of governmental interference. It is reasonable to suppose that if our currency and banking facilities had been developed by private initiative, free from the control of legislatures and supervising officials, we might, by this time, have "blundered through" to an adequate and efficient system. Indeed, in some particulars it might possibly excel the government controlled plan under which we have operated. But, the provision of a medium of exchange and the safeguarding of the public's accumulations of funds are so susceptible of abuse, particularly in a country where entrance into the banking business is relatively unimpeded, that the rules of the game have to be defined with great care. Otherwise the emergence of a modern financial organization

would have been attended with even greater loss and suffering than have darkened the path of American banking.

The policy pursued at any given time with respect to the problems of banking and currency is a composite of various forces of which constitutional and legal provisions are a partial expression. Whichever of the many conflicting points of view is in the ascendancy at the time determines the character of a given piece of legislation.

After the legislative body has had its say in the United States, the higher courts exercise an important influence upon the trend of financial policy. The necessity of confirmation by the Supreme Court of the right of national banks to exist, to have a monopoly of note issue and, many years later, to exercise trust powers, has been a potent factor in determining the course of our banking development. On the other hand, these same decisions, together with such conspicuous cases as the granting of a clean bill of health to the guaranty of bank deposits, the sanctioning of the tax exempt bonds of the Federal Farm Loan System, and the upholding of the fundamentals of the par collection system give us the comforting assurance that the highest court is disposed to give law-making bodies the largest possible latitude consistent with a liberal interpretation of constitutional limitations. In fact, in its decisions upholding the constitutionality of the legal tender quality of the greenbacks, the Supreme Court of the United States may be said to have emulated the well-known example of President Jefferson of "stretching the Constitution until it cracked," rather than to create an almost impossible situation.

Every now and then, a daring public administrative official will undertake to meet a difficult financial situation by upsetting all precedent. Historic examples of such a case are the action of Secretary of the Treasury Shaw (1902) in attempting to provide elasticity to our banking structure by permitting banks to offer state and municipal bonds as security

for a government deposit, whereas, before, only United States bonds were accepted; the ruling of Comptroller of the Currency Crissinger (1921) permitting a national bank to open branch offices, when his predecessors had consistently maintained that it could not be done lawfully.

Even though our financial policies have been much influenced by statutory enactment and the decisions of judicial bodies and administrative officials, their nature cannot be fully understood without delving into the traditions, practices, and body of prevailing opinion upon which, in a democracy, laws and decisions are largely based. In our search, therefore, for a complete picture of our present monetary and banking policy, we need to consider both the provisions of the National Banking Act, of the Federal Reserve Act, and of the other legislation of Congress and the states bearing upon the problem; and we need to review the judicial interpretations placed upon this mass of laws. But our most significant material will be found in a study of our economic and political institutions. After all, the banking philosophy of a country is not a thing apart from its general political and economic philosophy.

2. Economic and Political Background of American Financial Policy

The United States was formed from a group of British colonies. Naturally, therefore, the attitudes and ideas of the mother country manifested themselves in matters pertaining to banks and money. But the radical difference in economic environment between Europe and America modified these notions materially.

In the first place, the vast store of untouched natural resources, and the lack of capital or equipment for exploiting them, created dissatisfaction with a money and credit régime which had been adapted to the advanced economic status

which Great Britain had attained. The pioneer American farmer or woodsman was willing to ignore approved credit standards, to which he could not hope to measure up, and to accept bountiful issues of paper money based upon shadowy security.

As our population spread over the fertile areas west of the Alleghenies, the psychology of equality and of hatred for anything that savored of plutocracy grew apace, and has become a prominent factor in the evolution of our practices and laws during the last hundred years or more. The so-called free banking principle upon which our present national and state systems were founded is a product of this frontier psychology. To it we owe our unique financial organization with its 27,000 banks, most of them resting upon a precariously slender capital structure. Likewise, the refusal of Congress in 1913 to establish a typical central bank, and the substitution of a regional device for performing central banking functions, are survivals of a long-standing prejudice against centralized financial power. The so-called money trust investigation in 1912, and the opposition to the spread of branch banking that now exists outside of the independent banks themselves, illustrate a similar antipathy toward banking concentration.

Another important element in the shaping of our financial structure was the state of our foreign commerce at the particular time our monetary system was devised. The coinage prescribed by Hamilton in 1791 was not the one we had inherited from our mother country but that of Spain, from whose colonies we derived the major part of the specie we had. The trade balance with them was generally favorable to us, whereas our dependence upon England for manufactured articles created an unfavorable balance and tended to denude us of all of our British coinage that was fit to send abroad. When the Continental currency was first issued in 1775, the Continental Congress pledged itself to redeem it

at some future date in Spanish milled dollars, rather than in English currency. Hamilton, likewise, chose the dollar as the monetary unit of the present Government—not because it embodied the ideals of coinage, but because it had long been the recognized measure of value. The mint ratio of 15 to 1, selected by Hamilton, was also a recognition of an existing situation, as nearly as it could be ascertained. He sought to do justice to both debtor and creditor by avoiding a disturbance of the existing market ratio and hence the level of prices.

The doctrine of isolation, which Washington proclaimed with much more reason than we can today, has colored our attack upon banking problems until the present time. We have been disposed to work things out in our own way and suffer from the results of ill-advised action rather than to profit by the experiences of other countries. With the departure of the National Monetary Commission (1909) to study banking and currency abroad, and their employment of a long list of foreign experts to contribute to various aspects of the problem of currency reform, the old attitude was discarded. Since then our banking legislation, notably the Federal Reserve Act, the rural credit legislation of 1916 and 1923, and numerous remedial measures passed by the states in behalf of the farmer and the urban worker, have drawn heavily upon European experience.

Another American tradition, in addition to opposition to plutocracy, is manifest in the attacks on branch banking. It centers in the sincere conviction that the independent small bank embodies the true spirit of American progress. The less spectacular growth of Canada is pointed out as an example of what we would have been had our forefathers not had the wisdom to repudiate the "silk stocking" financial ideas of the British and substitute a system of home-owned banking enterprises. To the local banker with his first-hand knowledge of and sincere interest in his clients' affairs is

attributed much credit for our more rapid national growth. What sort of development the United States might have had under a different banking system will always remain uncertain. Conditions in Canada, while like our own in many respects, are sufficiently different to make comparisons hazardous. However much the small bank may have contributed to our development in the past, its continuance should be made dependent upon its adaptation to our present and future requirements.

In spite of our traditional attitude towards entangling alliances with other nations, and our refusal to participate officially in the deliberations of the League of Nations, we are becoming more internationally minded. Our credit is being advanced freely to countries in every part of the world. European experience in banking and currency is being studied without apology, and workable ideas copied. Federal Reserve officials participate openly in conferences with the heads of the central banks of Europe. Gold credits are placed at the disposal of nations who are reconstructing their currencies, and purely national discount policies are subordinated to those which are in the interest of world progress and stability.

In our position of relative isolation during the nineteenth century we were less influenced by the action of our neighbors than were the countries of Europe, particularly the continental nations. Proximity to other nations that had abandoned bimetallism was a large factor in forcing Germany to abandon it in 1871. Similarly, it was the close association of the Latin nations which caused them to form a monetary union and bolster up the bimetallic system in 1865. Its abandonment, a few years later (1873–74) by virtue of the demonetization of silver, was likewise the result of proximity. The overrated silver coins poured in upon the Union members from neighboring countries.

Whether a nation desires to coöperate with its neighbors

or not, it clearly cannot pursue a given monetary policy alone without seriously complicating its commercial and financial dealings with other countries. Whether it be monometallism, bimetallism, a compensated dollar system or a managed currency plan, it suffers a great handicap if this is operated by a single country. To all of the uncertainties of commerce, a difference in monetary systems adds uncertainty as to the future relationship of the value of the home monetary unit to that of the country with which a firm is transacting business. China, with her silver standard, and her principal trade with gold standard countries, has been a classic example of a country where, in addition to the ordinary risks of foreign trade, one had to protect himself against changes in the market price of silver.

The fact that mankind has shown a decided preference for gold has had an important influence in shaping monetary policy. Bimetallic systems have always had to contend against this preference, while gold monometallic systems have taken advantage of it. Even if little or no use is made of the redemption privilege by holders of other forms of money, or if, as was the case during the period of our participation in the World War, it was the general understanding that the privilege was not to be exercised, the presence of a substantial stock of gold inspires confidence in the whole financial structure.

Currency reforms, which propose the abandonment of a gold reserve, and base the stability of purchasing power upon the accuracy and fidelity with which currency and credit are restricted, would lack the psychological contribution which an ample stock of gold affords. The qualities which, early in the history of mankind, caused gold to be preferred to other substances still make it a potent influence in holding public confidence.

Much of our legislation on banking and currency has been in the interest of a particular class or group. For example,

in the period following the Civil War, the abandonment of the announced policy of retiring the greenbacks, and the addition of large quantities of silver dollars, were part of an effort in behalf of debtors to combat the harmful effect of the downward secular trend in prices. The mortgage-encumbered farmer was the principal object of these correctives, although the silver mining interests have always been active in securing the additional market for their product which government purchases afford. Numerous provisions in the Federal Reserve Act, not to mention the mass of state and Federal rural credit legislation, testify as to the zeal of political leaders in seeking to placate the agricultural population. In some cases, unfortunately, laws have been enacted as a sop to, or compromise with, farmers by urban interests which wanted to concede as little as possible without alienating the farm vote.

3. Custom as a Factor in Determining Financial Policy

We have been considering the more or less positive factors which are wielding an influence upon our national financial policy. There exists a powerful negative force which for want of a better term may be styled "custom." Frequently, although pretty general agreement exists that a provision or practice is undesirable, an inherent dislike of change, which is particularly strong with respect to financial matters, stands in the way of action.

The public adjusts itself to a given practice or arrangement and, even though a better way might be found, prefers to continue with that which is familiar. The national banking system and the greenbacks were instituted largely as instruments of Civil War finance. It was never intended that the latter should be in circulation five years after the conclusion of peace, and yet $346,000,000 of the original issue are still outstanding, almost sixty-five years later,

with no prospect of being retired. Even the national banking system was regarded by some as a temporary fiscal device which would give way to state banking as soon as its services were no longer required. At present, there is not only practical absence of a sentiment that the national banks should be abolished, but Congress has come to their rescue whenever the greater liberality of state bank requirements threatened to place national banks at a disadvantage.

As we shall observe when we study the policies of internal management in American banking, practices like the granting of trade discounts, initiated because of the chaotic post-Civil War credit conditions, have become deeply rooted. All of the skilfully conducted agitation in behalf of European methods of mercantile financing, which was carried on simultaneously with the inauguration of the Federal Reserve System, failed to make any change, except to substitute a relatively small volume of trade acceptances for open book accounts.

In 1913 it was the thought of the Democratic majority as well as the Republican members from the rural districts that a regional reserve plan of central banking would eliminate the very great concentration of funds in New York, and that the system of interbank relationships which served as its vehicle would be largely superseded by the relationship of a member bank with its Federal Reserve Bank. We shall find when we discuss the subject of correspondent relationships that the existence of the Reserve System actually has not had a marked effect upon the old situation.

The post-war situation has afforded numerous examples of the permanent retention of practices instituted as war measures. Conservative England substituted £1 and 10 shilling paper currency of a war government for the larger metallic pieces in her pocket circulation. When, however, war-time conditions were past, instead of returning to the old custom, she made these small bills a permanent part of the note issue

of the Bank of England. True, a desire to conserve gold was partially responsible for this retention of paper currency, but the change in monetary habits originally forced by the war has caused the permanent change to be accepted without dissent. Throughout Europe, likewise, the old specie-carrying habits, disrupted by the exigencies of the war, seem unlikely ever again to be resumed. In those parts of the United States where a prejudice still existed against paper money, and gold coins were used to do the work of the five-, ten-, and twenty-dollar denominations, there is not the slightest agitation in favor of a return to the use of gold coins. War alone seems powerful enough to disrupt long-standing monetary and banking customs, and after it has passed, the old resistance to change stands in the way of a return to pre-war practices.

Under the stress of war, changes can be made overnight which in peace times might require a generation. Later on in our discussion, we shall consider the series of war-time amendments to the Federal Reserve Act, which changed the original measure fundamentally, only three or four years after its passage had marked the culmination of twenty-five years of careful study of the problems of banking reform. It stands to reason that such ill-considered changes are not likely to prove of fundamental soundness under the test of time, but, in spite of their emergency character. scarcely any of these amendments have been repealed.

It is quite obvious, then, that the United States, as well as most other countries, has floundered considerably in arriving at its present monetary and banking policy. We did not start with a ready-made, scientifically perfect system of money and credit, nor has there been any time in our history when we have cut completely loose from the traditions of the past. Hamilton came as near to doing so as any American financial reformer, but, as we have seen, even he was guided to a large extent by the situation brought about by

the character of our trade relations. The Federal Reserve Act embodied the most revolutionary changes we have made since Hamilton's time, and yet the reforms it instituted were largely superimposed upon an undisturbed structure of national and state banks.

Experts like Professor Kemmerer and others have been enabled to introduce far-reaching reforms in a number of currency systems. In some countries, financial organizations which had reached a fairly high state of development have been reconstructed, but in almost every instance the situation had been thoroughly bad for a long time before the experts were called in. For this reason, the public mind was receptive to radical changes, provided they were likely to remedy intolerable conditions. Even in such cases, a painstaking first-hand study has been made of the particular situation. Then, instead of prescribing a cut-and-dried remedy, the staff of experts has adapted its recommendations to the peculiar requirements of the individual country.

In spite of the strong resistance to change in the field of legislation governing money and credit, it is highly desirable that every government take stock from time to time, by way of creating a commission or board to make a thorough study of existing institutions and policies and to offer a comprehensive set of recommendations to serve as a guide to future action. It must be admitted that in the United States such bodies have at times been the haven of "lame duck" legislators whose findings have not had great weight. Nevertheless, it is still the best method by which legislation of a forward-looking constructive character can be framed. Before such legislation can be expected to pass the average American legislative body it will be disfigured with concessions to this or that interest, but even then work toward a well-balanced program will yield better results than piecemeal tinkering without reference to the perspective of the whole problem.

4. Is There an American Monetary and Banking Policy?

One wonders as he contemplates the situation in the United States with its forty-nine separate banking systems, not to mention numerous other forms of credit organizations, how there can rightly be said to be an "American" policy. There are, it is true, forty-nine sets of constitutional provisions governing the conduct of credit operations, even though the Federal Constitution does not specifically deal with the subject. There is a like number of legislatures and courts of review. In addition, there are forty-nine distinct administrative departments to which are entrusted the supervision and regulation of banking operations. In each section of the United States, moreover, there have developed certain characteristic attitudes and practices with respect to banking operations.

Closer study, however, reveals the fact that differences in the spirit and method of American banking as carried on in our numerous jurisdictions are not fundamental. One legislative body or constitutional convention has copied freely from the others. Decisions in one higher court have great weight when a similar case is up for determination in another. The state supervisors of banking, both informally and through a national organization, are working in the direction of uniform standards and practices. The operation of a bank of a given size is quite the same problem in Maine as it is in Texas. The prevailing types of industrial activity may be different, but the same general methods obtain in granting credit. In spite of its great size as compared with all of the countries of Europe except Russia, the various sections of the United States are more homogeneous than most of the non-contiguous regions of a European state. One of our American states may make of itself a laboratory for some banking experiment that seems to differentiate the state in question from its fellows. Systems for the guaranty of

bank deposits, state-wide branch banking, and state rural credit organizations are cases in point. But from the start, they are watched by all of the rest of the country with deep interest, and sometimes concern. Sometimes, before a project has had time to demonstrate its economic soundness, other states proceed to copy its provisions. It is highly unlikely that any device which proves its unmistakable superiority will fail to have an ultimate nation-wide acceptance. Local custom and tradition will exercise a wholesome restraining influence, but the forces of uniformity will eventually prevail.

BIBLIOGRAPHICAL NOTE

While there are no books dealing primarily with the nature of monetary and banking policy, a good idea of the general character of its earlier development in the United States can be obtained from such works as A. B. Hepburn, *History of the Currency* (New York, 1924); W. G. Sumner, *History of Banking in the United States* (New York, 1896), or the same author's *History of American Currency* (New York, 1874). Horace White's *Money and Banking* (New York, 1914), is very useful if one desires a briefer survey of the history of American banks and currency. H. P. Willis, *The Federal Reserve System* (New York, 1923), and his introduction to Willis and Beckhart, *Foreign Banking Systems* (New York, 1929), present the able and discriminating views of that author with respect to recent monetary and banking evolution.

CHAPTER II

POLICIES RELATING TO THE BANKING STRUCTURE

In spite of a pronounced tradition of conservatism in the matter of structural changes in banking, the public and the bankers have, in recent years, accepted a number of radical changes. In fact, the first third of the twentieth century will probably be characterized by economic historians as a period of important departures from time-honored banking ideas. Before considering these modifications specifically, we will do well, first, to review the important distinguishing characteristics of American banking, in order that we may grasp more fully their true import.

1. Our Composite Banking Structure

American banking is done by forty-eight state systems, one national system, several special organizations under state or national control, branches of foreign banks, and private banking firms. No two of the forty-nine sets of laws and regulations governing banking operations are identical. In their early years, the national banks were regarded more or less as temporary instruments of Civil War finance. It was generally supposed that, after they had fulfilled their mission of facilitating the absorption of the large federal bond issues, and the collection and disbursement of war revenues, a general demand for their extinction would arise. This attitude, however, soon gave way to one of acceptance of the national

system as a permanent part of the financial structure. Moreover, the granting to them, in 1865, of a monopoly of note issue gave them a distinct advantage over other banks, and enabled them to grow at the expense of the state systems and the private institutions. The Civil War, and the post-war conditions culminating in the panic of 1873, for a time, wiped out most of the state banks, and thus gave the national organization a most favorable field for development.

Adhering rather strictly to the English conception of the field of commercial banking, Congress had placed fairly severe limitations upon the lending operations of national banks; but this handicap was more than offset, in the earlier years, by the monopoly of note issue. Checking accounts had, as yet, only a limited vogue; hence a much larger percentage of bank loans was made in the form of actual money. Therefore, a bank which had its own currency to lend possessed a much greater advantage than is true today, for loans made in the form of money are now inconsequential. Instead, then, of being abolished, the national banks may be said to have dominated the situation for fully twenty years after the Civil War.

As time went on, and the use of deposit currency became widespread, the advantage gradually shifted to the state and private bankers. Most of the state laws governing loans and discounts were more liberal than corresponding provisions in the National Act, and better suited to the type of business predominant in small communities. The minimum capital stock requirements were smaller in the state systems; the percentage of capital and surplus which could be loaned to one borrower was more liberal in many states; and the character and term of loans generally afforded greater leeway. By 1900, these disadvantages had begun to tell upon the national system to such an extent that Congress was prevailed upon to liberalize the National Banking Act. Again in 1913, further concessions had to be made to bolster the system, and

minor amendments to the same effect were added at intervals. Finally in 1927, after several years of obstructionist tactics, chiefly on the part of the opponents of branch banking, the McFadden-Pepper Act was passed, broadening very considerably the powers of national banks. Now the pendulum seems to be swinging to the side of the national system. In fact, some are so bold as to predict that, by 1950, all of our banks will be operating in a single federal system. The recent rapid growth of branch banking and the probable development of nation-wide branch systems lends credence to such a prophecy.

The McFadden-Pepper Act, in fact, not only seems to have removed the causes for numerous voluntary liquidations among national banks, but to have provided enticing bait to state banks to convert into national associations. The indirect and complicated process through which a state bank had to go, before it could be merged with a national association, has been greatly simplified. Perpetual charters have been granted to all national banks, because of the conflict between periodically expiring charters and the acceptance of long-term trusteeship by a bank's trust department. Savings and investment departments of national banks are given official sanction, and permission is granted to lend upon urban real estate up to five years. National banks in the suburbs of large cities, with only a neighborhood clientele, may now operate with a capital and surplus commensurate with their volume of business, instead of having to meet the same requirements as a downtown institution. With certain restrictions, branches can now be established in cities where state banks are entitled to maintain such offices. Reports to the Comptroller of the Currency have been reduced from five to three per year, and commercial bills and bankers' acceptances have been excluded from the ten per cent of capital and surplus which constitutes the upper limit of accommodation which can be granted to any one borrower.

We shall not concern ourselves here with the significance of these detailed provisions. They are cited in this connection merely to reveal the length to which the Federal Government is going to protect its creatures, the national banks, from the competition of state-chartered enterprises. The considerations which brought the national government into the business of chartering and supervising banks have long since become obsolete, or at least inconsequential; but the national system has been a decided influence for better banking and has won the public good will. As the base upon which the Federal Reserve System was erected, the passing or even the material weakening of the national system would threaten the whole reserve banking structure. Where such spirited competition exists between two important banking groups, there is always the danger that the respective law-making bodies will become too liberal in their efforts to give the competitive advantage to their particular creatures. The privileges accorded by the McFadden-Pepper Act could be used by the unscrupulous and incompetent national banker in such a way as materially to lower the standards of the system. Our protection lies in more enlightened management and effective public supervision, principally in the former.

Whatever the future may bring forth, we are faced at present with the problem of two sets of banking corporations, existing side by side, carrying on substantially the same functions, but answerable to different authority. Rivalry is always a mixed blessing. In this case, it has undoubtedly fostered the spread of new ideas, but it also, unfortunately, generates a spirit of "going the other fellow one better" in the matter of concessions. A unified system under federal jurisdiction would probably not prove so adaptable to the peculiar credit needs of particular regions and states; but it would possess the advantage of uniformity, and in states which now have lax laws and supervision, would tend to raise banking standards materially.

The private commercial banks are being compelled to take out state or national charters, or to submit, at least, to state examination. The number remaining is now so small that the private bank has ceased to be a factor of consequence in the American banking structure. Large banking houses like Morgan and Company are, of course, not included in such a statement, for they do not carry on a banking business in the commonly accepted use of the term.

2. Our Numerous Independent Units

A second structural characteristic peculiar to American banking is the huge number of independent banks, about twenty-seven thousand in all (1929), most of them insignificant in size. As will be seen in another connection, this situation is the result of a revolt against the abuses of our early nineteenth century system of creating a few banks by special legislative charter, virtually giving a monopoly to those which were friendly to the political party then in power.

Following the lead of New York, the states, one by one, adopted the principle that "Thomas and Richard and Henry" could be bankers if they chose, that it was undemocratic and un-American to restrict this privilege to a favored few. Lobbies for obtaining charters gave way to the simple filing of papers with a designated state official and compliance with the provisions of a general banking law. So rapidly did this so-called free banking plan take root in the United States, that when Congress, in the early years of the Civil War, set about to create a national banking system, it was taken for granted that a free banking plan should be followed. The only outstanding difference in the national and typical state plans was that Congress gave the Comptroller of the Currency, the head of the new system, discretionary powers with respect to the granting of charters, whereas the

corresponding state official, as a rule, had to grant every application which came to him in proper form.

No other nation has adopted the American idea of many independent banking units. The Japanese, in their zeal to imitate everything American, following the friendly relationship established by Commodore Perry, copied our national system, but after a brief trial abandoned it for the European plan of a relatively small number of strong banks. A condition of absolute independence of operation between banks would, of course, be unthinkable. From the very nature of their business they are compelled to establish working relationships. Banks in financial centers have long rendered a variety of services to their correspondent banks and, in turn, have called upon these correspondents to handle transactions for them. Thus, in spite of what appears to be on its surface an unrelated mass of independent units, we find that an elaborate system of more or less formal inter-bank relationships had been developed long before the Federal Reserve System was superimposed as a unifying element.

3. Mergers and Consolidations

The United States itself is witnessing what seems to be a distinct trend away from this multiplicity of small independent units. As in industry and merchandising, the large organization with or without branches is in the ascendancy. The revolt against "special privilege" which brought us our legion of small banks still voices itself in opposition to the wholesale amalgamations taking place, but the public, on the whole, is accepting "big business" in banking as well as in other fields as one of the inevitable developments of the modern age. This tendency, however, is by no means peculiar to the United States. Canadian banks have amalgamated with such rapidity that but ten remain in the entire Dominion. The Canadian authorities have not been dis-

turbed over the prospect of a money monopoly—in fact, many of the mergers and absorptions have been encouraged by the government and the public, inasmuch as institutions on the verge of insolvency were absorbed by others which were able to assume their liabilities and thus avert wide-spread suffering. In one or two cases, the ministry of finance has actually aided in bringing about an amalgamation, in order to protect the depositors of the absorbed institution. Naturally, the stockholders of the embarrassed bank have to accept a hard bargain, but they are likely to fare much better as owners of even a considerably reduced number of shares in a large and sound enterprise than if they attempt to resuscitate an unsound one. Moreover, the additional banking resources and facilities acquired by the new concern should add materially to its earning capacity.

Consolidations and mergers in England, likewise, have taken place at a rapid rate. More than eighty per cent of the country's banking resources are now in the hands of five banks with their more than ten thousand offices. Even the English, among whom branch banking and large units, generally, have been accepted as a matter of course, were startled at the rapidity with which this development occurred during the later years of the World War. Parliament created a commission of inquiry which, while it did not recommend the "unscrambling" of any of the merged institutions, did warn the banks that the movement had gone far enough, from the standpoint of the public interest. It predicted a wide-spread clamor for government ownership of all banks if further consolidations were made.

In the United States, while the movement has been very striking since the World War, our situation as yet is far from that of Canada or England. In contrast with England, our five largest banks control less than a tenth of our banking resources. What another ten years will bring forth is a matter of conjecture; but there have been more than fifty impor-

tant bank mergers in New York alone during the past decade, and the movement is showing no tendency to subside. Opposition to branch banking is still strong enough to confine the domestic banking activities of our new financial giants to their own communities, except in California, where state banks and national banking associations, which brought a system of branches with them into the national fold, are emulating the English and Canadians in their efforts to concentrate the banking facilities of the whole commonwealth in a few institutions. Already, through such devices as the holding company and investment trust, banking groups are ignoring state lines in their acquisition of additional units. Unless a wave of popular disapproval prevents, it is likely that our Federal banking laws will, sooner or later, give sanction to interstate branch banking. Just as in Canada, mergers in our American cities and the acquisition of independent banks in California have undoubtedly been the means of saving critical situations. Banks in a hopelessly unliquid position have been absorbed by healthy institutions and both depositors and borrowers greatly benefited. In over-banked communities, particularly in the Middle West and South, two or more unprofitable competing institutions have been merged into a healthy, profitable enterprise. In the majority of cases, however, chief objectives have been to do a greater volume of business at a lower cost, to make larger loans to individual borrowers, to extend the services of trust, investment, and foreign departments, or to acquire a particularly profitable going concern.

The automobile and the paved highway have made a bank in every hamlet unnecessary, but, on the other hand, have so increased traffic congestion in cities as to furnish a strong argument for banking facilities in outlying districts. Wherever the laws permit, the large city bank is hastening to provide these facilities by establishing branch offices. No doubt rivalry between banks for the mere honor of being

the "biggest" has been a factor of considerable importance in the recent succession of mergers. New York has not had so small a number of banks in over forty years, and never before has there been so marked a concentration of banking power in the hands of a very few leading institutions. The eight largest banks in New York have more than two-thirds of the total banking resources of the city.

This centralization of control in the hands of a few bankers has long been a cause of anxiety upon the part of the "William J. Bryan school" of politics and economics. In 1912, before banking concentration had reached anything like its present status, the situation was the subject of an elaborate congressional inquiry known as the Money Trust Investigation. The committee in charge of the inquiry reported the existence of such an interlocking of interests that the outstanding commercial banks and trust companies, public utilities, railroads, and manufacturing and distributing agencies were allied with one or another of a small group of banking houses. These houses, in their turn, were reported to work very closely together. No definitely organized money trust was disclosed, but in the committee's opinion, the same object was accomplished by the high degree of coöperation existing among the financial leaders. After a passing flurry of interest in the committee's findings, the public ceased to manifest concern over the situation. Aside from the incorporation in the Clayton Anti-Trust Act of a provision limiting the holding of interlocking directorates, the specific recommendations of the committee were not carried out.

The bankers and businesses which were the object of the inquiry of 1912 are considerably more powerful now than they were then, but our urban population at any rate has been relatively very prosperous, especially since the war. The restriction of immigration and increased efficiency in production have given the worker the highest real wage he

has ever enjoyed. Hence he has not been disposed to concern himself seriously over the "evils of big business." Our agricultural population, on the other hand, has not enjoyed the same degree of prosperity. In fact, it has not at any time since 1920 re-attained the state of relative well-being which prevailed for a long period preceding the war. Consequently, the farmers' spokesmen, in and out of Congress, are highly critical of our whole financial and industrial set-up. The development of huge banking units through consolidation does not affect the farmer directly, but he feels that they will foster protected urban interests and thus take an increasing toll from him indirectly through the goods and services he buys. The grain and cotton farming regions are opposed to the spread of branch banking, not because they have any great affection for the local independent banker, but because they are afraid that credit terms will be more harsh and that funds will tend to flow to the head offices in cities, depriving agriculture of a large share of its rightful capital. California's experience has been that a branch banking system, like any other business enterprise, will seek to employ its funds in the most profitable combination of uses consistent with safety. Sound self-liquidating agricultural loans are among the most attractive forms of earning assets a bank can have. Self-interest has dictated to the branch banks, therefore, the wisdom of supplying all of the legitimate seasonal calls for credit at the local branches, not only by utilizing all of the locally accumulated funds but by transferring additional resources. With the elaborate financial machinery provided by the Farm Loan System and the Intermediate Credit System, together with the farm credit facilities of the Federal Reserve System, agriculture is obtaining all of the capital it needs at rates which compare favorably with those granted to urban business.

Financial mergers have undoubtedly reduced costs of banking operation. Whether the public has some of the sav-

ing passed on to it, depends upon the degree of competition which still exists among banks. Lessened competition and larger units usually mean less friendly personal interest, greater political influence, and other ills of large-scale enterprise; but so long as several business giants are seeking business from the same territory, there should be enough competition to foster adequate service and reasonable rates. If they eliminate competition, then the state will have to step in to protect the public interest.

4. Department Store Banking

American merchants learned at an early date the advantages to be gained from assembling under a single roof every sort of merchandise a shopper would be likely to buy. Overhead costs could be reduced and the volume of sales increased. The banking world does things more slowly, but it too has discovered that the same advantages can be attained by bringing into one place the whole category of financial services. Here, also, the general operating expense per dollar of business is lowered. Customers who are receiving one type of service will tend to seek to satisfy all of their financial wants in the same place. As has been indicated, American banking has been, and Canadian banking still is, under the influence of British banking theory of the last century. As an institution of discount, deposit, and note issue, its credit operations were to be confined to short-term self-liquidating transactions. Time deposits could be received, but no commercial bank should give the appearance of operating a savings department. About the only auxiliary services proper for a bank to render were the purchase and sale of exchange and the collection of credit instruments. While the state banks in America did not adhere strictly to this narrow conception, our national system was dominated by it almost completely, before the passage of the Federal Reserve Act and the other

subsequent liberalizing measures discussed earlier in this chapter. Opportunity for additional profit, greater convenience to patrons, and the force of competition from other banks and trust companies, have led to the addition of one activity after another until the well-appointed bank or trust company of today is equipped to render any form of financial service. We shall examine later at greater length the changes in public regulation and supervision necessitated by this new conception of banking, as well as the new problems which it has brought to bank management. The modern bank and the modern unaffiliated trust company differ only in name. They are both composites of the old commercial bank, savings bank, trust company, bond house, insurance company, safe deposit company, and mortgage house. Some banks perform all of these functions through a single corporation, while others operate through a group of affiliated institutions. The latter arrangement is usually a survival of the days when banking legislation had not caught up with banking ideas, and subsidiary institutions had to be created in order to perform all of the functions desired.

In the mercantile world, the specialty shop still thrives along with the department store. Each seems to make its special appeal to shoppers. In the field of finance, however, the lot of the specialist is not so promising. Strong independent savings banks still exist, but the proportion of institutional saving done in savings departments of regular banks is increasing at a rapid rate. The banks have already made serious inroads into the business of the independent bond houses. Even now, in fact, the bond houses affiliated with large banks and trust companies have come to occupy a leading place in the field of investment securities.

Instead of financing merely the seasonal requirements of the farmer, merchant, and manufacturer, banks lend a large portion of their funds to speculators and investors, and lines of credit in some fields are so continuously used as to consti-

tute a more or less permanent investment in the business on the part of the banker, although a periodical "clean-up" of indebtedness is ordinarily required. Banks buy and sell investment securities and lend upon farm land and urban real estate. The existence of a savings department in a bank or trust company, with its pass book and time certificate of deposit, justifies the holding of mortgages and bonds, a policy which a few years ago would have been taboo.

The trust company, as is still the case in Canada, was originally intended to confine its activities to strictly fiduciary relationships, such as administrator, guardian, conservator, and trustee. Actuated by motives similar to those which impelled banks to departmentalize, the trust companies gradually branched out into the banking field. Those which have been affiliated with commercial banks have not gone the full length in duplicating banking services, but the unaffiliated companies, as a rule, are indistinguishable from the banks. This development had attracted so little attention that, prior to 1907, legislatures had taken little cognizance of it. Even conservative states like New York had made no provision for the maintenance of reserves against the demand deposits of a trust company. Their dignified calling as trustees, together with the ease with which the banking relationship could be added to the fiduciary services performed for clients, had made it easy to build up a relatively large volume of deposits in a short time. The panic of 1907 caught the New York trust companies in a badly overextended condition, and disastrous failures ensued. As a result, New York, followed by other states, took the banking functions of trust companies fully into account by imposing upon them the same restrictions as state banks were required to observe. Little or no question was raised as to the propriety of a trust company's exercising banking prerogatives. Its entrance into that field was taken as a matter of course.

As a device for securing new clients and increasing deal-

ings with old ones, the modern bank with its tempting variety of financial wares is cleverly conceived. The public convenience is served and the added departments ought to increase earnings out of proportion to the increased expense. On the other hand, the problem of administration becomes much more complicated, and, in the small departmentalized bank, just as in the rural general store, there is danger that the greater the variety of wares offered, the less satisfactory the service is likely to be.

5. Branch Banking

Branch banking is by no means a new development in the United States. From the establishment of the First Bank of the United States in 1791, branch banks have been in existence continuously. The First Bank of the United States established eight branches, and the Second Bank (1816) twenty-five. The so-called state banks of the period preceding the Civil War had branches, and some of our states have continued, ever since, to sanction them. As has been indicated, the New York free banking act revolutionized American banking. Free banking did not necessarily preclude the establishment of branches, but, from its very nature, militated against them. Prior to free banking, it was difficult to secure a bank charter, and relatively large enterprises were the only ones with the means and influence to secure it. Consequently, the needs of smaller communities had to be cared for through the establishment of branches. The great ease of starting a bank under the New York free bank system, on the other hand, encouraged the formation of a large number of small independent units. Moreover, the whole spirit of free banking was opposed to anything that savored of a financial "octopus" like a branch system. The structural unit of the free bank organization was the independent bank which had but a single place of doing business,

where it received a few deposits and loaned its bond-secured currency.

Our national bank legislation, likewise, made no mention of branch banks, except to provide that a state bank converting into a national association could bring with it any branches it had in operation at the time. The various Comptrollers of the Currency and Attorneys-General who passed upon the question prior to 1921 assumed that since the National Banking Act was silent regarding the right to establish branches, such a step was not permissible. When, therefore, the Comptroller and the Attorney-General, in the Harding administration, in 1921, decided to break away from this traditional attitude, only twenty-nine of nearly eight thousand national banks had branches. In every case, these were the result of conversions from, or consolidations with, state banks. In addition, an inconsequential number of national banks indirectly owned branches through the control of the stock of a state bank or trust company.

The change of attitude at Washington was due largely to the unequal competitive situation in which national banks found themselves in certain large cities. State banks in New York, Detroit, Cleveland, and several other metropolitan centers were establishing numerous branch offices at strategic locations, while national associations were permitted but the one office. Knowing that it would be a long and tedious process to attempt to secure relief from Congress, the two officials in question authorized the opening of outlying offices for the receipt of deposits and cashing of checks, at the same time pointing out that no new powers were being conferred upon national banks by their ruling. The Comptroller specifically forbade the establishment of full-fledged branches and limited the right to establish the check-cashing offices to those banks which felt compelled to take such action in order to meet competition. This action was in the nature

of the case a makeshift. It remained for Congress, after seven long years of controversy, to place its stamp of approval upon intra-city branch banking, in 1927.

Meanwhile, the legislatures of all but six states have arrayed themselves on one side or the other of the branch bank question. At present, twenty states specifically forbid the establishment of branches of any sort, while twenty-two definitely permit them. The remaining six have no branch banks, but there is nothing in the laws to prevent their creation. Only eleven states of the twenty-two permitting branches approve their establishment outside of the city or county in which the head office is located. It is interesting to note in passing that practically all of the prohibitory laws on the subject have been placed upon the statute books since 1900, evidence of the fact that the independent banker read the "handwriting on the wall" and proceeded wherever he was able to entrench himself against an on-coming foe.

The whole atmosphere and point of view of American banking have favored the perpetuation of the unit institution. The small-town banker who had associated with him a group of the better-to-do farmers and business men represents the "Spirit of American Banking." He carries the business affairs of his clientele in his head, serves as the community's economic and agricultural advisor, and takes the lead generally in community affairs. His like cannot be found elsewhere. Other countries have long looked upon banking as the privilege of the few, who from their central offices would furnish banking accommodation to large numbers of people. Small independent banks in Canada and Europe have long since been swallowed up or relegated to comparative insignificance by large joint-stock branch establishments. Our frontier traditions, our decentralized political and economic institutions, together with the great extent and diversity of our geographic area, have entrenched the

small independent unit in banking, long after the branch idea became fully accepted in the manufacturing and merchandising fields.

As late as the decade following 1909, the year in which California startled the banking world by sanctioning the creation of state-wide branch banks, there was little disposition, even in that state, to use the privilege extensively. When the movement did acquire some momentum in 1919 and 1920, the urge did not come from the public, even though considerable distrust was being manifested toward certain independent banks, and there was a desire on the part of interests with heavy seasonal requirements for larger accommodation than the typical country bank could grant. The real impetus seems to have come from several vigorous and able bankers in Los Angeles and San Francisco, each of whom was ambitious that the resources of his institution should outstrip the rest. This vigorous competition was whetted by the hostility of the independents. So strong was the influence of the independent banks at that time that the superintendent of banks, in 1921, was induced to promulgate a *de novo* rule, whereby no new branches could be established outside of the city of the parent bank, unless in the superintendent's judgment public convenience and advantage required it. Furthermore, by seeing to it that no northern California bank opened branches in the South, and vice versa, he further limited expansion and, in effect, changed the state-wide concept into a regional or sectional one. Further restrictions were added in 1923, when banks were forbidden to open any *de novo* branches at all, could not acquire further branches outside of the home city, unless both bank and prospective branch had existed for three years, and were not allowed to establish more than one such branch in any case. However, all branches in existence for three years or more could be retained in case of a merger of two banks. In spite of these restrictions, state banks and trust companies in Cali-

fornia made very extensive additions to the number of branches. The national banks, meanwhile, either resorted to the subterfuge of operating branches through an affiliated state bank or trust company or contented themselves with such intra-city offices as the new ruling of the Comptroller of the Currency permitted. These events, though confined to a single state, are of nation-wide significance, since California has chosen to become the laboratory for one of the most important and far-reaching banking experiments this country has ever witnessed.

The facts we have given regarding the situation in California reveal very strikingly the strength of the branch banking movement, in the face of the combined hostility of the state authorities and a united body of independent bankers. The majority of the people of California, while they may or may not prefer to do their banking business with an independent enterprise, are not averse to seeing the large branch institutions given a free hand. In 1926, they defeated the administration responsible for the restrictive policy we have just described, and placed in power a governor who was committed to the liberal interpretation of the state's branch banking laws. As is usually the case, other important issues were at stake; but the fact that they were willing to endorse a candidate with such a program indicates, at least, that they were not frightened at the prospect of a more extensive branch banking development.

The new régime has been true to its word. Within a short time after its inception, in 1927, by virtue of absorption, consolidation, and *de novo* branch establishment, several gigantic systems emerged. One of these, the Bank of Italy, with its more than three hundred branches, has suddenly become one of the largest banks in the United States.

The rest of the country is watching the venture with keen interest, and, in some quarters, apprehension. The persons who fear and hate any manifestations of "big business" are

strongly opposing its spread to other sections of the country. In cities, where traffic congestion has made a hardship out of a trip to a downtown bank, the intra-city office is hailed as a great convenience and as probably safer and better able to serve its constituency than is its small competitor. On the whole, outside of these convenient offices in large cities, it cannot be said that there is as yet any spontaneous or widespread demand for the extension of branch banking. This does not necessarily mean that such extension will not take place, nor that it will be accorded an unfriendly reception after the public has adjusted itself to it. Chain stores and other businesses of the extensive type did not come as a result of public demand, but because of the greater rewards to be had from large-scale operation. The public accepts them only because it believes it receives better service and lower prices.

The prevailing public indifference on the subject of branch banking has not been shared by the bankers of the country. Recent conventions of the American Bankers' Association, composed as it is of influential men on both sides, have been the chief battle ground. Representative McFadden had introduced in Congress a bill which sought to place national banks upon an equal competitive basis with state institutions, and to establish a definite policy governing the creation of branches by national banks, and by state institutions belonging to the Federal Reserve System. Immediately the whole contest over branch banking centered around the McFadden Bill. So determined was the opposition that several sessions of Congress passed without final action. At last, in 1927, it passed both houses and was approved by the president. This measure offers merely an entering wedge to national bankers into branch banking, for its opponents were strong enough to surround such operations with the most severe restrictions. The Act permits all existing branches to be continued, even though, as was the case with the Bank of

Italy, some were acquired just before the measure was signed. The Bank of Italy, now that it has become a national association, cannot acquire branches in cities or villages where it did not have a branch on the day the Act was approved, but it has ever since been active in purchasing competing independent banks and merging them with one of the branches already existing in that particular community. It is the prestige of the national system, seconded perhaps by a belief in the willingness of Congress further to liberalize the McFadden Act in the near future, that has led two of the largest state-wide systems, the Bank of Italy and the Security-First National Bank, to shun the state banking system with its much more liberal provision for the establishment of branches, and to accept the severe limitations placed upon them by the federal government.

The whole spirit of the portion of the McFadden-Pepper Act dealing with branch banking seems to be, "The Federal Government does not approve of branch banking, but if the national banking system is to continue, we shall have to permit its members to do the things their competitors are doing." But even now the national bank is still at a disadvantage in some situations. No matter what a state does, or may permit, in the way of branch extensions, national banks must not expand beyond their present locations. In respect to the number of intra-city offices, they are held to an upper limit which varies with the size of the city, except that in cities of more than 100,000 population the number is left to the discretion of the Comptroller of the Currency. No new branches may be created outside of the city in which the main office is located. Congress was somewhat more liberal in its treatment of state member banks. They also may continue all branches in existence when the McFadden Act was signed and may open new ones in the location of the home office, regardless of population. They must not, however, establish any new extra-city branches. They must

have the sanction of their respective state authorities also, and national banks must likewise refrain from opening branches in states where branch banking is not allowed to state banks.

It is evident that at least an attempt has been made by Congress to make everyone happy, by compelling national banks to govern their actions by local sentiment instead of defying it, and by prescribing a uniform policy for the whole country.

Ten years hence, it will be much easier to evaluate branch banking as applied to American conditions. At present any assertions we may make are based largely upon *a priori* conclusions. The fact that other countries have had branch systems for generations and have shown no disposition to change is not conclusive evidence so far as we are concerned. The difference in setting and traditions may be sufficient to vitiate our reasoning. Furthermore, who can say with absolute assurance that Canada, for example, might not have experienced a much greater development under the spur of an independent system like our own?

Branch banking is a form of large-scale production, which calls for a central managerial staff and scattered operating units. As such it possesses much the same elements of strength and weakness as are encountered in merchandising and manufacturing establishments having a similar type of organization. First, other things being equal, there is always greater stability as well as opportunity for profit in an enterprise which is not dependent upon a single season or commodity. One reason for the growth of branch banking in California has been the existence of rather sharply defined agricultural and horticultural areas. The fortunes of one area are tied to the citrus fruits. Another is predominantly a prune and apricot region, another a raisin area, while a fourth specializes in poultry, melons, or cattle. Local bankers in a highly specialized area are likely to find them-

selves alternately prospering or seriously embarrassed, as the fortunes of the particular commodity rise or fall. The state, as a whole, has a most varied list of economic activities and marked differences in climatic conditions. It stands to reason, therefore, that a bank which can carry on its business in a considerable number of areas is in a much better situation than one which stakes everything upon the fortunes of a single crop. The central office can, by shifting its available funds from one area to another, insure the maximum utilization of its working capital. This same process is carried on by independent city banks and their country correspondents, but a branch system operated as a single unit can accomplish it in a simpler and more direct way. Certain residential communities, all of the time, and other communities during their dull season, have in their banks a marked excess of deposits over the legitimate demands of borrowers. Independent banks meet this situation by sending the excess to correspondents to be employed in financing speculation and other activities of urban centers, to be invested in securities or commercial paper, or to be loaned in sections where a different seasonal situation calls for additional working capital. Here again a single branch bank has an advantage in respect to the ease and swiftness with which it can act.

As we shall see when we consider bank failures, the policy of placing all of a bank's eggs in one basket has been a fruitful source of trouble. A branch system with paper in its portfolio from a score of kinds of enterprises obviously is less likely to fail than one which confines its loans largely to wheat growers, sheep ranchers, or oil producers. Another obvious advantage possessed by the branch bank is its ability to extend as large a line of credit as any of its borrowers is likely to need. The National Banking Act restricts the amount of accommodation to one borrower to one-tenth of the bank's capital and surplus. The state banking laws have similar provisions. In some regions, as for example the

peach or apricot areas, a very large sum of money is required for a space of a few weeks, in order to pay for the raw material and the other expenses entailed in canning and marketing the product. A local bank with a capital of twenty-five or fifty thousand dollars would be of little help to a concern which may need as much as a million or two dollars. It has to appeal to its city correspondents to help it meet its customers' requirements. A branch bank with its capitalization of many millions will have no difficulty in meeting the needs of the largest borrower.

Considerable anxiety is felt in smaller communities, inexperienced in branch banking, lest the head offices in the cities will denude the smaller communities of their money. There is no more reason why this should be true under branch banking than in a system of independent banks. Money funds will always tend to flow to the place where there is the most profitable use for them, and will continue to obey this law under any type of banking structure. Even if the stockholders of the large branch banks resided in the cities, as is far from being the fact in California, the dividends they received would flow back to the country districts in proportion as these areas purvey the commodities and services which the urban dweller requires.

A bank is a purveyor of services. It must be judged upon the basis of their adequacy and their cost to the consumer. We have just seen that a branch bank possesses certain advantages in respect to its lending function. Its other services should be considered, however, before we undertake to make a general appraisal of its advantages or shortcomings. The modern bank, as we have observed, renders a great variety of services. In addition to making loans and receiving deposits, it acts as an economic adviser, it sells investment securities, it insures the lives and property of its customers, it administers their estates, it sells them exchange on all parts of the world, and it fosters the accumulation of rainy-

day savings. Some of these functions can undoubtedly be performed quite as well by a locally-owned independent bank, but when it comes to services requiring large resources or expert knowledge of a highly technical character, the independent country banker is at somewhat of a disadvantage. Unless he is extraordinarily capable, he will have to appeal to his city correspondent for help.

One of the elements which is going to weigh heavily in the determination of the success or failure of branch banks is the factor of human relations. After all, the personal factor is almost as important in banking as in law, medicine, or the ministry. When the average man buys a staple article of inconsequential value, he cares little about the personality of the salesman, or the extent to which a personal interest is taken in his needs, but when he deals with his banker, he considers the relationship a very personal one. Any type of bank organization which underestimates the strength of this feeling is doomed to failure.

The country banker knows his clients. He is conversant with their financial status, and with all of their personal habits and idiosyncrasies. He works with his fellow officers and employees and they too know their customers and are interested in pleasing them. The bank is usually owned locally and is zealously striving to advance the interests of its community in general and its patrons in particular. The officers and directors, local men, have the final authority in respect to all questions.

Opponents of branch banking point to what they consider an unhappy contrast in the branch of the large city bank across the village street from the locally owned enterprise. A hired manager is in charge. He may have come from some distant place and has neither deep interest in the community nor an intimate knowledge of its business problems. His actions are governed by elaborate sets of regulations, formulated in the head office. He must submit to the preparation

of numerous and vexatious reports to his superiors. He can settle only certain matters; all the while he is beset with traveling auditors, department heads, and other functionaries who are telling him how the head office wishes him to run the establishment. He and his fellow employees will not possess that proud sense of proprietorship which is productive of the highest type of service. The customer who used to take many hours of the president's time talking over his investment problems, before the bank became a branch, feels that the atmosphere of the place is decidedly impersonal, not to say chilly.

Branch bankers in the United States seem to be alive to these evils which are likely to creep into their type of organization and are making every effort to eliminate them. When a branch is acquired through the purchase of a local bank, the same officers and employees are left in charge. Competent "directors of public relations" are retained, and every device is used to inculcate in employees a high sense of interest and loyalty. Younger men are sent out to new branches, but they are instructed to make themselves an intimate part of the community. Managers are granted as much latitude in making loans as the head office considers to be consistent with sound policy. When the branch banker is taken to task for his alleged greater insistence upon collateral security, he points to the appalling list of failures which has attended the more lax loan policies of the independent bankers.

In Canada it has been found undesirable as a rule to send eastern Canadians to Western branches—further evidence of the importance of the element of personal relations. Canadian banks allow their local managers leeway in lending, according to ability and experience. A youthful executive is frequently restricted to a maximum of a thousand dollars, while some of the more responsible managers are given *carte blanche* up to $75,000. Canada's chief complaint has been with the arbitrary attitude of the small branch managers.

The borrower would frequently be glad if the manager would refer the loan to the head office.

A new branch bank organization made up, say, of two hundred units, is at once confronted with the usual expense connected with the operation of each branch plus a heavy addition to its overhead costs. High salaried general executives, department heads, auditors, bookkeepers, clerical and stenographic help, as well as the upkeep of the head office building, equipment, and supplies add a considerable burden to an organization. This means that the two hundred units must earn considerably more than they did as independent banks. Economies through standardization in building, equipping and operating the banking plant, savings in the purchase of supplies, increased income from the more effective employment of the bank's funds, and more widespread utilization of its various services must be relied upon to meet the heavy addition to the total operating expense.

If the large inter-city branch banking systems of the Pacific Coast can demonstrate that they are serving the public more effectively and at lower cost, at the same time providing greater safety to depositors and larger profits to stockholders, the movement is bound to spread rapidly to other parts of the country. It is reasonable to expect that some day a few banking chains with head offices in New York may dominate American banking. Already, under the guise of an investment trust, the Trans-America Corporation, which owns a controlling interest in the Bank of Italy, has obtained control of several New York banks. The McFadden Act prevents the merger of such institutions into a single branch bank, but it cannot prevent their operation by a common management. There should be nothing startling about the prospect of nation-wide branch banking. It would only be in keeping with the line of development industry and commerce have followed, as well as with the course of banking evolution in older countries.

Perplexing problems enough confront us without our having to conjure up others; but it is pertinent to this discussion of branch banking to suggest that if the time ever comes when the banking facilities of the nation are in the control of a half dozen or so nation-wide branch organizations, our present ideas as to public regulation and supervision will have to be thrown into the discard. As we have found with our other "super-businesses," regulation becomes very difficult, especially that phase of it which undertakes to preserve free competition. There is this consolation: in America, with a free-for-all system of twenty-seven thousand independent banks, there has been more complaint about a "money trust" than could have been heard in all other countries combined, although in practically every important foreign country the banking power is concentrated in the hands of less than a dozen branch banks.

The growth of branch banking systems will probably have a marked effect upon the Federal Reserve System. Since the existence of a large number of banking units, which had no dependable source of help in time of need, is the primary reason for having a Reserve System, the formation of large branch systems will tend to lessen the usefulness of the Reserve Banks. The head office and branches constitute a good-sized clearing and collection system in themselves, so that the volume of items sent through the Reserve System would be materially lessened. With its great resources, well-diversified as to season and risk, one would expect the branch bank also to make much less use of the rediscount facilities of the Reserve Banks than the same number of independent banks would do. The five branch banks which dominate English finance boast that they do not have to rediscount bills at the Bank of England at all. But their situation is somewhat different, inasmuch as they virtually compel certain customers to borrow at the Bank of England whenever a monetary stringency arises, by refusing to extend them fur-

ther credit. No matter how powerful branch banks in America become, there will still come periods of stringency when they will need the aid of a central banking system. Our banking laws do not permit individual borrowers to deal with the Federal Reserve Banks; so the emergency aid will have to be secured for customers by the branch banks' rediscounting operations. As the protector of the public interest and the servant of the government in financial matters, the central banking system has an indispensable part to play. No matter how few or how powerful the ordinary banks become, the responsibility for the protection of the gold reserve and for the adequacy of the supply of money and credit should not be left to them. These are functions that call for a quasi-public central or regional banking system, in which earnings are secondary to the safeguarding of the national welfare. We attempted for many years to get along without such a system, and fared badly. Canada has never established a central bank, the government and the public having looked to the Dominion Treasury and the leading banks for the performance of functions commonly ascribed to an official public bank. As the Dominion's economic development progresses, it may become necessary to create a central bank in order adequately to insure the execution of central banking and fiscal responsibilities.

When in 1928 the Canadian House of Commons instructed its committee on banking and currency to study the existing financial organization, the hearings centered largely around the question of establishing a central bank. While the committee's final recommendation was adverse, it urged that a further study be made of the future financial needs of the Dominion and the changes in the banking structure required for stabilizing the credit structure and insuring an adequate supply of loanable funds.

A modified form of branch banking has existed in the United States for several decades. It is known as chain

banking, and is characterized by the existence of a number of independently incorporated banking units, controlled through stock ownership by a single person or by an associated group of individuals. In many instances the sole motive of the dominant interest is that of diversification of bank stock investments. So long as the respective banks pay good dividends, there is little or no interest taken in their internal affairs by the owners. Some chains of separately incorporated banks, however, are completely under the domination of the controlling interest. It may force the undesirable paper of some investment concern which it controls, or otherwise manipulate the assets of the individual members of the chain in order to further its own selfish ends. Little has ever been done at the head office of such chains to introduce better banking methods in the individual institutions, or to assist in improving the content of their loan and investment portfolios. Since the majority stockholder is more or less in the background and frequently lives in a distant city, there is no device by which effective regulation and correction of abuses can be secured, for the state and national supervising authorities deal with each member of the chain as a separate and distinct entity. In a branch banking system, there is but one corporation. It is out in the open, with all of its activities subject to the supervision of the same authority and treated by him as a unit. Strange to say, chain banking heretofore has flourished in states which pride themselves upon the strictness with which branch banking is excluded from their borders, and yet the chain system possesses many of the weaknesses and few of the virtues of the branch system. There is nothing inherently wrong if one group owns the majority of stock in a number of banks. The weakness of chain banks is most apparent when they manipulate their affairs to the detriment of their clients and are able to hide behind a form of organization for which no adequate regulatory machinery has been devised.

After the investment trust movement had reached its present height of popularity, some of the large city banks formed allied corporations for investing in a wide variety of stocks. The shares of banks have been a particularly popular type of investment. While the holding corporation does not undertake to operate these institutions, it frequently keeps in close touch with their affairs and helps them with their problems.

6. International Banking

The foreign commerce of the United States has long been of impressive size, and yet, until very recently, we have depended largely upon Europeans for its financing. English and continental European bankers have for generations ignored national boundaries and have financed commerce, industry, and governmental undertakings in all parts of the globe. A few private banking firms in New York have done a portion of the financing of our foreign trade for many years, and in the late nineties and early part of the present century, small foreign departments were established by large state and national banks. But the bulk of their business arose from the demand for foreign funds on the part of travelers, or immigrants who desired to make remittances to relatives in the home country. Taken as a whole, the point of view of American banking was not even national. The vast majority of our many thousands of independent banks was concerned only with the credit needs of immediate localities.

Several factors have contributed to our failure to participate in international financial operations. In this volume we have already laid much at the door of our "Tom, Dick, and Harry" system of many small banks. This system is also partly responsible for our inability to enter upon financial undertakings outside of a bank's own community. Bankers

had neither the resources nor the training to participate in foreign projects. But more important than our type of banking was the economic situation which prevailed in the United States. No nation had been more richly endowed with natural resources of every variety. Their exploitation commanded all of the capital our moneyed institutions could supply, together with large sums from abroad. Until the World War we had been a debtor nation, returning to Europe annually large payments of interest and dividends. Even when the large metropolitan banks were in a position to make a beginning in financing foreign trade in a small way, they found themselves handicapped in several particulars. First, the difficulty of finding a suitable staff confronted them. Financing of imports and exports has a technique all its own, which cannot be acquired over night. Either trained foreigners had to be secured or Americans put through a course of instruction. Second, our banking laws and traditions had been built around the short-term self-liquidating domestic trade transaction. If American banks were to make any headway against European competition, it was seen that we must become habituated to longer credits and must liberalize our laws.

This liberalization began with the passage of the Federal Reserve Act in 1913. This Act permitted national banks with a capital and surplus of a million dollars or more to open branches in foreign countries, and it conferred upon national banks the right to accept bills of exchange. It should be added that the latter provision was not prompted entirely by a desire to see our national banks expand their foreign banking activities. The sponsors of the Federal Reserve System regarded the development of a central discount market as essential to the success of central banking operations, and the banker's acceptance as an important part of discount market machinery.

It is not essential to the development of a foreign depart-

ment that a bank maintain its own branch offices in important foreign cities. From the standpoint of the American exporter whose goods are competing with the native output, an American branch bank will probably display more zeal in looking out for his interests than will a native bank with its natural bias toward its own merchants and manufacturers. However, the expense and the personnel problem are such as to restrain the large majority of banks engaged in financing foreign trade from owning their own branches. Instead, they have built up a system of correspondents similar to that employed among banks within the country. Even the very largest banks do not undertake to have their own offices in every foreign city where they have business to transact. They establish branches in only the most important centers and depend upon correspondents elsewhere. The World War and the wave of interest generated by the foreign banking provisions of the Federal Reserve Act caused a rapid extension of branches by American banks. European banks had been badly crippled in their international operations, and the world looked to the banks of the United States for this service. When the world-wide crisis of 1919–20 came, there were numerous American branch banks scattered over the whole world. In the world-wide ruin which followed the crisis, a number of them had to be abandoned. Since then few extensions have been made. During this six-year period of rapid expansion (1914–20), Congress had done much to foster the movement. In 1916, they made it lawful for national banks with a million dollar capital and surplus to invest not more than one-tenth of their total capital and surplus in the stock of foreign banking corporations, thus enabling banks to have a proprietary interest in foreign branch banks even if they were unable to own their own foreign offices. Later, national banks, regardless of size, were allowed to place not more than a twentieth of their capital and surplus in a foreign banking enterprise. Again,

in 1919, further impetus was given to the movement by the passage of the Edge law, which provided for the chartering, under Federal auspices, of corporations to engage in financing foreign trade. The acute need for capital on the part of foreign countries at the close of the war led Congress to provide for two distinct types of enterprises under the Edge Act. One devotes itself to lending on long-term securities and selling debentures against them as collateral. The other confines itself to the financing of imports and exports —issuing letters of credit, accepting and collecting bills of exchange, furnishing credit information to exporters, making advances to exporters against shipments, and all the other activities incident to a full-fledged foreign banking establishment. Several smaller institutions were actually chartered and a hundred million dollar project was launched under the most imposing auspices, but it never succeeded in raising the necessary capital. By 1920, foreign trade had become a perilous undertaking. Failure and repudiation were driving some houses into bankruptcy and the rest were writing off staggering losses. Large amounts of capital were being loaned in Europe and South America, but the Edge plan of selling debentures against the securities of foreign concerns did not appeal to the American investor. The credit of foreign firms did not constitute adequate security in the eyes of the meticulous public. Old established American banking firms were solving the problem by lending directly to the foreign borrower and exacting a guarantee from his government that the obligation would be met.

Thus far we have been concerned with the efforts on the part of the United States to provide suitable organizations for achieving its ambitions in the field of international banking. We shall now consider briefly the second line of endeavor to which reference was made, namely, the development of the banker's acceptance and dollar exchange.

Prior to the passage of the Federal Reserve Act, if an

American importer desired to strengthen his credit with a foreign exporter, he first established his credit standing, through the good offices of his home bank, with a London bank or accepting house. The latter issued to him a letter of credit under which it accepted (guaranteed the payment of) the drafts which the seller would draw as he sent out shipments of goods to the importer. The federal government did not permit national banks to do this type of business, and only a few of the states permitted it. Consequently, our importers' bills were sponsored by English bankers and carried in the London money market till they were due. They were then presented to the accepting bank for payment out of funds which the American importer provided.

Buying under a letter of credit from a well-known bank enables one not only to win the confidence of the seller but procures a lower price, for the drafts drawn against an accepting bank will always sell to better advantage than will those drawn against the ordinary importer. American importers were anxious to have the accepting power conferred upon our own bankers, for they did not relish the payment of two fees—one to the home bank for arranging the letter of credit, and the other to the London bank which actually issued it. Moreover, since the drafts on English banks were drawn in pounds sterling, the American importer had to encounter the risk of loss through fluctuations in the rate of sterling exchange. American bankers, likewise, did not relish sharing the acceptance fee with another institution, or having their customers' bills financed in a distant discount market. Permission to do this sort of business came at a very opportune time, for the war had begun and business with London bankers was carried on with difficulty. Consequently, our bankers soon fell heir not only to the American customers of the London accepting institutions but to many importers in other countries. Since the war our banks have retained our own importing houses, but the majority of the foreign

clients have gone back to their old institutions. American importers now have their bills drawn in dollars and settle with the accepting American bank in dollars, thus avoiding the fluctuations in foreign exchange rates. The American exporter has also turned to his own banker for financing his operations. Frequently, he is unable to sell a time bill of exchange and still he desires to realize as much ready cash as possible from the transaction. Under our present laws, his bank can make direct advances to him on the security of the shipment of goods or will allow him to draw a banker's acceptance against them, which he can sell on the open market as soon as the bank has placed its guaranty upon it.

Under the leadership of the great private banking houses of New York, American banks and private investors have loaned billions of dollars to foreign governments and corporations, in the last decade. Some of these loans were undoubtedly ill-advised and may prove to be uncollectible, but we have definitely entered upon a new financial era. The war made us the leading capital market of the world. Instead of placing all of our investments in domestic enterprises and calling upon Europe for more money, we are not only financially self-sufficient but are investing the excess over our own requirements in the four corners of the earth.

A discussion of the superimposition of the Federal Reserve System upon the existing banking structure might properly be discussed in this chapter on important structural changes, but it seems preferable to deal with the Reserve System separately under a discussion of central banking.

BIBLIOGRAPHICAL NOTE

For good general surveys of the problems related to the banking structure one should consult R. B. Westerfield, *Banking Principles and Practice* (New York, 1924), and H. G. Moulton, *Financial Organization* (Chicago, 1925).

The question of mergers was given a thorough discussion at the Consolidation of National Banking Associations Hearings, Banking

and Currency Committee, U. S. Senate, 69th Congress, 1st Session, 1926, which have been issued as a public document. Joseph Sykes has treated the subject of mergers comprehensively in his *The Amalgamation Movement in English Banking* (London, 1926).

The outstanding books on branch banking are S. D. Southworth, *Branch Banking in the United States* (New York, 1928), and C. W. Collins, *The Branch Banking Question* (New York, 1926). Chain banks have received their most thorough treatment at the hands of Mildred Hartsough in her book, *The Twin Cities as a Metropolitan Market* (Minneapolis, 1926). Valuable material covering both branch and chain banking is contained in H. P. Willis's discussion filed with the Banking and Currency Committee of the United States Senate, 1926, in connection with the "Bank Inquiry of 1925."

Two books by G. W. Edwards, *International Trade Finance* (New York, 1924), and *Foreign Commercial Credits* (New York, 1922), together with a recent work by C. W. Phelps, *The Foreign Expansion of American Banks* (New York, 1927), are recommended for a further study of our development in the field of international banking.

CHAPTER III

POLICIES OF INTERNAL MANAGEMENT

It is not within the province of a treatise on the broader aspects of American banking policy to discuss the details of daily bank routine. They are quite simple in character and do not involve questions affecting the public welfare. The direction which the major policies of bank management are taking, however, is of vital social significance, inasmuch as practically every business enterprise, and—directly or indirectly—every household is affected. It is solely from this point of view, therefore, that certain important tendencies in internal administration are considered.

Probably no two of the twenty-seven thousand American banks conduct their affairs in precisely the same manner, but, out of the confusion of laws and customs governing the administration of banks, certain ideas may be segregated as characterizing our banking practice.

Since in no other country do statutory requirements wield so great an influence over managerial policies, we shall be concerned somewhat with the subject of public regulation, discussed in a later chapter, but it is of interest to us here only in so far as it has an important influence upon the direction taken by American bank administration.

1. Administrative Responsibility in American Banking

Aside from the relatively few private institutions still remaining, the American bank may be said to have a repre-

sentative form of government, although in many cases the president or executive vice president has gathered to himself so many of the directors' powers that the organization has become more or less a benevolent despotism. Legally, the ultimate direction of affairs lies with the stockholders, but they delegate the general administration of the enterprise to the board of directors. Normally, this body is chosen from the active heads of other businesses and can give but a minimum of time and thought to the bank's affairs. This means, of course, that a great deal of authority must be delegated to the officers and to the board's committees. It is conceivable that a directorate might take so active and detailed a part in the management as to impair its efficiency materially. After all, their most important task is to select the right sort of officers and to accord them a large measure of freedom in conducting the business. The real difficulty, however, has usually lain in the opposite direction. One of the outstanding weaknesses in American banks is that directors regard their positions as an empty honor. Directors are usually selected because of their high standing in some business or profession, on the theory that, when matters come up which involve a first-hand knowledge of their particular field of activity, they can speak with authority. Since the normal bank caters to a wide variety of needs, this theory is entirely sound. The difficulty has been that each member of the board finds his own business so absorbing that he never takes the pains to acquaint himself thoroughly with the principles of credit granting or the other important phases of bank management. He is content to let the president or cashier administer affairs in his own way, and performs the work of a rubber stamp when their acts are up for approval. Many a failure might have been averted or an embezzlement nipped in the bud, if the directors had had anything like a real understanding of the standards and practices in vogue in the institution. There is, then, a golden

mean between a mere "Yes man" and one who impairs the smooth running of an organization by refusal to delegate a reasonable amount of power and responsibility.

In the matter of lending or investing the bank's funds, when the borrowers and amounts involved constitute no departure from the bank's policy as laid down by the board, there is no justification for postponing action, pending the approval of the directors. So long as the board meets frequently and the members are given full information as to all extensions of credit, the stockholders and depositors are afforded reasonable protection. In a large bank, so many important departures from the ordinary routine of lending are continually coming up that a special committee of directors is set up and given considerable discretionary power with respect to the approval of applications for loans. Even here, however, the full board should, at frequent intervals, review in detail the actions taken, and question departures from the accepted policy of the bank—a precaution all too frequently neglected.

The stockholders of national banks, and of nearly all of the state institutions, in case of failure, are legally liable to lose not only the amount they originally invested, plus accumulated earnings, but may be required to contribute, under the so-called double liability provision, an additional amount equal to the par value of their stockholdings. They can, however, shift this liability to the directors if it can be shown that the members of the board acted fraudulently or were negligent in the performance of their duty.

Some states go so far in their efforts to insure honesty on the part of bank directors as to forbid them to borrow the institution's funds. This undoubtedly tends to reduce the volume of ill-advised loans, which all too frequently send a bank into the hands of a receiver, but it is asking rather too much of a group which has the most at stake in an enterprise to compel its members to patronize a rival institution, when

they seek credit accommodation for the mercantile or manufacturing concerns with which they are associated. Usually, it ought to be sufficient to require that loans to directors should receive the sanction of the full board. No doubt, a wealthy director who owns a large block of stock is not an easy man to oppose, but no matter how large a share of the stock he controls, he and his colleagues owe a responsibility to the depositors and other creditors to see to it that the funds of the bank are not subjected to undue hazard. The record of causes of bank failures points conclusively to the need of great vigilance in this direction. If a director is also a full-time officer or employee of the bank, like other full-time employees, he should expect, as a matter of course, that if he is granted loans at all, they will be subjected to more than ordinary scrutiny as to their purpose, size, and security.

It is almost a universal practice in the United States to require the board of directors to make periodical examinations of the books and assets of the bank. This duty is usually performed in a most perfunctory manner, and is a bore to the members and an annoyance to the employees. In the limited number of instances that a well-qualified firm of accountants has made the examination for the directors, much helpful information has been received, and valuable suggestions forthcoming.

Obviously, then, a board of directors should concern itself first with the selection of the major officers and the formulation of major policies, and second, with a frequent review of the manner in which these policies are being carried out. A prudent bank executive will regard his board of directors not as a nuisance or necessary evil but as counsellors of tested business experience in a wide variety of fields, who therefore can bring to his aid an equal variety of points of view and a clear understanding of the credit problems peculiar to their respective lines of business.

2. American Policy in Respect to Capital Stock and Surplus

The capital of a bank, which includes its paid-in capital stock, its surplus, and its undivided profits, is the buffer which stands between the depositor and the loss of his money, in case the bank fails; for these items represent the stockholders' claim upon the assets, and the claims of stockholders naturally must wait until other claims are satisfied. Obviously, then, the larger the percentage of these liabilities accruing to the owners, the greater is the shrinkage the assets can undergo without impairing the claims of the depositors and other creditors. It stands to reason, therefore, that a generous amount of capital in proportion to deposits is a *sine qua non* of banking safety. Here American banking has been conspicuously weak. A bank will begin business with a paid-in capital corresponding fairly well to the volume of business it is likely to have in the near future, but as the community grows and the volume of deposits increases, all too frequently the management relies upon the increase of deposited funds for additional working capital. In so doing, it is little by little reducing the factor of safety provided by the shareholder's interest in the business. Our laws and customs have been too lax in respect to the maintenance of a proper relationship between the equities of the owner and of the depositor. As the deposits increase, the capital should be increased proportionally by the sale of new stock, the declaration of stock dividends, or the increase of the surplus. The stronger American banks have shown commendable forbearance in restricting dividend payments and allowing the surplus earnings to remain in the business in the form of the so-called surplus fund. This is regarded as a permanent addition to the bank's capital, and is not disturbed, except in extraordinarily bad years, when the undivided profits account, and any reserves which were set up to meet losses, prove to be inadequate to offset the writing off of bad loans

and investments. From the standpoint of the depositor, however, greater protection would be afforded by the declaration of a stock dividend than by accumulating earnings in the surplus, for the national act and the banking laws of practically all of the states attach a double liability to the ownership of bank shares. Fifty thousand dollars in capital stock, therefore, is twice as great a protection to the depositor as is the same amount in the surplus, provided that when the bank's stockholders are assessed or sued for the additional $50,000, it proves to be collectible. All too frequently, the shareholder has suffered so heavily from the failure of the bank and from the prevailing economic situation that only a fraction of the amount is actually obtained. A well-managed bank, however, will not compel its three proprietorship items—capital stock, surplus fund, and undivided profits—to bear the whole brunt of misfortune in its loan and investment policy. It will reduce periodically the book value of its building, furniture and equipment, and set up generous funds for the absorption of uncollectible debts.

3. Policies Affecting Deposit Accounts

In the United States, bank deposits, subject to check, form a large part of our medium of exchange. Some laboring people in the cities and towns, and some of the smaller farmers, still continue to pay entirely with actual money, but the average individual relies for the most part upon checks drawn against funds deposited in a bank. If he lacks the cash or its equivalent for the purpose of establishing or increasing such a checking account, the bank, if his credit standing is good, will allow him to establish it by borrowing and leaving the proceeds of the loan on deposit. In fact, the greater part of our deposits subject to check originate in this way.

The bookkeeping and other services involved in caring for

these daily deposits and withdrawals account roughly for most of the expense attached to bank operation. If a sufficient sum is left on deposit so that the bank can reimburse itself out of the income earned, by lending or investing it, a charge for handling the account is not justified. On the other hand, if a depositor keeps his account drawn down to a point where the bank is unable to offset the expense of taking care of it with the earnings from it, a service charge may justly be imposed. Excessive competition among banks, together with the lack of satisfactory cost analysis systems, has loaded upon profitable banking accounts the heavy losses incurred in caring for the unprofitable ones. This situation is rapidly changing, however, and progressive bankers are making frequent and careful analyses of deposit accounts. Not only is a monthly charge made where the average daily balance has fallen below a certain set minimum, but some depositors are notified that, because of the excessive number of checks drawn and the heavy expense attached to an unduly large volume of out-of-town collection items, the bank can no longer afford to carry their accounts. While we usually associate bank failures with injudicious lending, the loss of earnings through unprofitable deposits has been a factor of importance. With the marked reduction in the number of institutions and the spread of scientific method among the rank and file of smaller banks, each customer's account will bear its own burden, instead of shifting it to other accounts or to the stockholders.

Unless a customer maintains a large daily balance, say one or two thousand dollars or more, it has been contrary to American policy to pay interest on a demand deposit in a bank. The value of the service rendered to depositors, together with the enforced reduction in earnings caused by the necessity of having funds at hand to meet withdrawals, is ample justification for this practice. Trust companies, however, have been much more liberal in this respect. Their

accounts are, on the whole, not so active, especially where an affiliated bank takes care of the commercial loans. Undoubtedly, an even more potent factor in the case is the fact that originally the trust company devoted itself to a strictly fiduciary business, and only within recent years has taken on banking functions. In order to attract business it was necessary to offer special inducements.

One of the most impressive developments of the last decade has been the rapid increase of time deposits as opposed to a much more gradual growth in the volume of accounts subject to check. From 1922 to 1926, the period of the most marked change, net demand deposits of banks, members of the Federal Reserve System, increased but twenty-seven per cent, while their time deposits increased ninety-three per cent. Time deposits now constitute more than forty per cent of all deposits.

The explanation probably lies in changing banking habits, in the marked reduction in reserve requirements as applied to time deposits, and in the general economic situation. In the first place, as we have seen, we are getting away from the narrow conception of a bank as a place for discounting bills and notes and checking against the proceeds. Custom and legislative enactment have recognized the right of a commercial bank or a trust company to do a savings business, whereas but a few years ago a national bank, for example, was not permitted even to intimate in its publicity that it was a competitor of the savings banks. Now that the savings field is open to savings banks, building and loan associations, commercial banks, and trust companies, every sort of device has been invented to stimulate the volume of savings. There is but a small margin of profit on each dollar deposited in a savings account, for the proceeds are for the most part invested in ways which make for safety rather than for high yield. After the three or four per cent interest has been paid the depositor, and the proper share of the expense of

doing business has been deducted, only a fraction of one per cent normally remains as the bank's net profit. If a considerable volume of time deposits can be built up, however, even this small percentage of return will add materially to the bank's earnings.

A second factor in the rapid growth of time deposits has been the changed attitude of federal and state laws toward the amount of reserve required for their protection. National banks, before the passage of the Federal Reserve Act, were required to carry as heavy reserves against time deposits as they had back of their demand accounts, viz., fifteen or twenty-five per cent, according to whether they were located in a non-reserve or reserve city. The present requirement of but three per cent is not only in striking contrast with these amounts, but is a much more liberal reduction than was accorded to demand deposits, which still call for a reserve of seven, ten, or thirteen per cent, according to the class of city in which the bank is located. This being the case, it is but natural that bankers are shifting as many accounts as possible to the time deposit category. With this decided reduction in expense attached to maintaining reserves, the earnings on time deposits have become much more attractive, and banks have made greater efforts to stimulate this class of accounts.

In spite of the competition for savings and other forms of time deposit, however, there is a definite current in the direction of lower interest rates, particularly in the more sparsely settled sections of the United States, where, instead of the three per cent rate characteristic of the older sections of the country, five or even six per cent has been paid on time deposits. Even with a large volume of deposits and the marked reduction in reserve requirements, a bank was unable to pay so high a rate and employ its funds in thoroughly safe undertakings. During the period of feverish expansion, cul-

minating in the crisis of 1920, the high rate paid time depositors was partially responsible for the excesses committed by bankers in the West and South. The prosperous condition of the urban worker since the World War, together with an almost phenomenal growth in the assets of insurance companies and building and loan associations has greatly increased the supply of loanable funds so that, in spite of the large volume of securities available for bank investment, there has been until very recently a distinct trend downward in the rate of yield of time fund investments.

Until recently, the savings account was supposed to be sacred to the wage earners and salaried workers of relatively small means, while the demand deposit was reserved for the business and professional classes. Such is no longer the case, inasmuch as large numbers of workers have checking accounts and many business firms have shifted a part of their checking accounts to time deposits. The recent growth of hand-to-mouth buying has relieved the business man of the necessity of accumulating such large balances in his current account. The post-war régime of falling prices has also reduced materially his requirements in the way of ready cash.

The tendency on the part of the United States Treasury to place relatively smaller amounts in banking institutions other than the twelve Federal Reserve banks has not been a great loss to the bankers, inasmuch as a depositary was required to purchase and deposit low-yield securities as collateral and to pay the Government a substantial rate of interest on its balances. Moreover, the bank was subject to the liability of meeting a large draft against the deposit at a time when it might be least able to do so. The depositary banks undoubtedly reaped some reward from the advertising value attached to the words "United States Depositary" emblazoned on its windows and stationery, but the advantage to the nation as a whole of having the Federal Reserve System act

as banker for the Government greatly outweighs any gains, direct or indirect, which may have accrued to the more fortunate of these "pet" banks.

A characteristically American policy has grown up in connection with the prevailing requirement that persons obtaining a line of credit at a bank maintain a minimum balance of twenty per cent during the life of the arrangement. Offhand, the bank seems to be attempting to "eat its cake and have it too," inasmuch as the borrower is paying interest upon the full amount of his loan and yet cannot avail himself of all of the resulting deposit created. The arrangement does add to the cost of borrowing, but justifiably so, because of the fact that in holding itself ready to meet the borrower's requirements, the bank has had to divert some of its resources from more profitable uses in order to await his convenience. Moreover, with the growth of commercial paper houses, bank borrowers would shift their requests for credit to them without warning, and as suddenly would fall back upon their bankers in an emergency. If one's bank is expected to hold itself in readiness to provide for the needs of its customers throughout a given season, the twenty per cent balance, or some other form of recompense to offset the reduction in earnings incidental thereto, is justified.

4. The Reserve Policies of American Banks

A banker knows that a certain portion of his cash will be withdrawn every day his bank is doing business. He can require notice from his time depositors, but, except in the face of a threatened crisis, he will not do so. No one can tell him what any one day will bring forth in the way of demands upon his cash. He must make a liberal estimate based upon experience. After the bank has been in operation for a sufficient time, he can make fairly accurate estimates as to what the requirements for the different days of the week

and the various seasons will be. If the character of the population tributary to his bank changes, he will probably be compelled to revise his estimates to conform to the change in habits of carrying money. An urban constituency has a greater deposit activity than a rural one. An excitable nationality with a high percentage of illiteracy will be much more prone to make sudden demands for cash than a more calm and erudite clientele.

The management must study its reserve position from day to day also, from the standpoint of the institution's earnings. If its unemployed funds are considerably in excess of what is required to meet probable withdrawals by present customers, together with what is needed to provide for new borrowers, the excess lending power should be utilized in a safe yet profitable way.

The laws of most countries assume that bankers are thoroughly capable and reliable men and that they can therefore be trusted, from the standpoint of their own best interest if from no other, to provide adequate sums of money for their tills. In the United States, however, because of our great number of small banking establishments and our reputation for injudicious banking, there is a prevalent feeling of fear lest, if a banker is left to his own choice, he may not provide adequate reserves. Consequently, for the past century, it has been the practice of lawmakers to prescribe the minimum amount that must be maintained in the bank's own vaults or as a deposit with some approved reserve institution. Usually, bankers have found it desirable to exceed the prescribed percentages, in respect to both the cash in their own vaults and their reserve deposits. With reference to reserve deposits, where the depositary is a bank other than one of the twelve Federal Reserve Banks, certain inducements are held out to country banks to carry as large accounts as possible. Interest is paid on a balance if it is maintained at or above a prescribed minimum, and the country banker's

out-of-town checks are collected for him at little or no expense. The more generous the account the out-of-town bank keeps with its city correspondent the more collection items it will be given to collect in its home city and the more favors of all sorts the city bank will be disposed to confer.

Since 1917, national banks (and member state banks that have been permitted by their states to disregard differing state requirements) are left to their own discretion as to the amount of cash they shall carry in their own vaults. The only required reserve is the deposit with one's Reserve Bank of seven, ten, or thirteen per cent (according to the class of city) back of demand deposits, and three per cent against time deposits. The idea which prompted the liberalization of reserve requirements was not the outgrowth of any illusion as to improvement in the standards and practices of banking in the United States. The framers of the Federal Reserve Act simply had such confidence in the System's ability to liquefy the assets of member banks that they believed the older and larger requirements would no longer be needed. Such has proved to be the case. Notwithstanding our most unfortunate record of bank disasters since 1920, banking has been rendered much safer by the substitution of a central banking system and of low minimum requirements for the old higher requirements which were not fortified by the existence of a dependable source of help in time of need.

The function of a required reserve is often misunderstood. It is commonly looked upon as an emergency fund that can be tapped in case of need. The fact is that, from its very nature, this is exactly what a required minimum reserve is not. When the state says to the banker that he must at all times maintain a given percentage of cash as a reserve, he becomes a lawbreaker if he utilizes any of this amount, or at least is under strict obligation to cease providing further for the needs of his customers until he has restored the

reserve to the proper minimum. An inflexible legal reserve, then, is of no practical help in time of need. It seems to be valuable only as a sort of bell buoy to warn the banker that he is navigating in dangerous waters.

On their face, the reserve deposits required of members of the Federal Reserve System would seem to be as unwieldy as the old vault requirements were, but, as a matter of fact, they have a higher degree of flexibility. Congress very wisely provided that a member's reserve might be permitted to fall below the prescribed minimum, subject to the imposition of a tax upon the deficiency. In case a national emergency should ever warrant such action, the Federal Reserve Board has the power to suspend, for short periods, any or all reserve requirements laid down by the Reserve Act. But of even more immediate and practical value is the nature of the present requirements themselves. In former days, a New York City bank, for example, was compelled to keep in its own vaults $2500 in lawful money for every $10,000 of either demand or time deposits on its books. Now, the sole requirement is that its deposit with the Federal Reserve Bank of New York shall be at least $1300 for every $10,000 of demand deposits and $300 for each $10,000 of time deposits. If it finds it necessary to increase this reserve deposit, all it needs to do is to sell eligible paper to the Reserve Bank and have the proceeds credited to its reserve account, whereas in the pre-war days it had to procure actual additional vault money in a country with a highly inelastic monetary system.

Deficiency of reserve on the part of member banks is no longer a potent warning against over-expansion. So long as they have eligible paper they can continue to maintain the required ratio between deposits and reserve. It is when the gold reserves of the Reserve Banks themselves become impaired that the credit structure is in a serious situation. Here are ultimately manifested the ills of continued borrow-

ing on the part of member banks for the purpose of restoring their reserves.

We have been considering the required deposit with the Reserve Bank as a minimum below which a member bank, ordinarily, must not fall. Unlike the deposit made with a city correspondent, the minimum is usually also the maximum, for the Federal Reserve Banks do not pay interest on deposits nor have they an alluring list of services to offer. All bankers who use the clearing and collection facilities of the Federal Reserve must also maintain a deposit of sufficient size to cover the "float," but here, likewise, only the amount required is turned over to the Reserve Bank. The fact is that, if a bank is to be profitable, every possible dollar of its assets must be employed in the most lucrative manner consistent with prudent management. Excess money in the vaults involves storage expense and brings nothing in return. After the amounts the law requires are set aside, all of the bank's remaining cash resources will be put to work, if possible. A wise banker never trusts entirely to his cash on hand or his deposits in other banks to assure his ability to meet all of the demands upon him. He knows the desirability of setting up a second line of defense back of these primary reserves. It will consist of loans and investments selected for ease of liquidation rather than yield. If the primary reserves run low, he can instantly turn his secondary reserve into cash. Before the Federal Reserve System came into being, loans on stock exchange collateral and investments in listed securities were practically the city banker's sole media for carrying a secondary reserve. Now, bankers' acceptances and customers' paper, eligible for rediscount with a Federal Reserve Bank, are also employed for this purpose. The only difficulty with stock exchange securities and loans, which have been carefully selected and safeguarded as to margins, has arisen in rare instances as in the autumn of 1914 when the organized market for securities ceased to func-

tion for some four months. At such times, a security becomes practically unsalable and therefore unfit to serve as a secondary reserve. Bankers have relied in the past, and still do rely, especially if they are not members of the Federal Reserve, upon their ability to obtain aid from their city correspondents. This takes various forms, but in any case involves a sale of paper or bonds to the city bank or a loan upon these instruments.

5. The Correspondent Relationship in American Banking

Countries in which banking is done by a few parent institutions with numerous branches have a close and ready-made inter-bank relationship between the head office and the branches. All that is needed to complete the chain of relationships is for the several parent banks to establish relations with one another through membership in clearing houses and other bankers' organizations. They will also have a common tie in their use of the facilities of the central bank or banking system, if there is one.

In a system like our own, composed of thousands of independent units, the problem of inter-bank relations is not so simple, but such relationships are bound to develop. One of the first impelling motives for the establishment of correspondent relationships was the desire to avoid the heavy expense attached to sending out-of-town checks and other credit instruments directly to the banks at which they were payable. The logical way out was to arrange with some centrally located institution to receive all, or at least the major part, of these items and to collect them on such terms as seemed just to both banks. Out of this grew the practice of maintaining balances with city bankers to compensate them for the collection expense and the loss of interest where the proceeds became available immediately. As has been indicated in the preceding section, the country correspondent

came to look upon his city depositaries as elder brothers who were able and willing to perform no end of financial services for him. In addition to furnishing him with funds to meet seasonal and extraordinary drains upon his cash, their staff has advised him how to employ a surplus of deposits during a dull season. Experts in the field of commercial paper and in the selection of bonds for temporary investment have been at his disposal. In the money centers, like New York, city correspondents act as agents in lending the funds of country banks in the stock market. The comprehensive credit files of the city bank are at the country correspondent's disposal, and he is permitted to sell domestic exchange against his account, and foreign exchange against the city bank's accounts in foreign banking centers. Country national banks have not a few dealings with the authorities at Washington, and find the Washington bureaus of their city correspondents of great assistance.

Two recent developments in American banking have served to modify inter-bank relationships materially. The first is the Federal Reserve System, and the second is branch banking. The designation of the Reserve Banks as the sole depositaries of the lawful reserves of member banks naturally removed one of the motives for maintaining a city account. This is also true of the establishment of rediscount facilities by the Reserve System and the creation of its nation-wide system of check collection, as well as its excellent facilities for the transfer of money by wire. Member banks, however, still continue to avail themselves of the services of city correspondents, and non-member banks, unless they are members of the par collection system of the Federal Reserve, have no direct dealings with the System at all. As was pointed out in an earlier connection, Federal Reserve Banks pay no interest on members' deposits but the city correspondent does. Consequently idle cash will be placed in his keeping, and only the required deposits with the Reserve Bank. Checks

on banks which refuse to belong to the clearing system of the Federal Reserve, as well as a certain percentage of other items, are still sent to city correspondents. Some members even do their borrowing from a correspondent, either because the collateral they have to offer is ineligible at a Reserve Bank or because they are the victims of a fear of imaginary "red tape" in connection with their dealings with the System. In spite of all of these elements that make for the perpetuation of the correspondent relationship, however, the development of Federal Reserve operations has made some inroads upon it, so far as the country member bank is concerned. If, as seems likely, branch banking supersedes our present system of independent units, the organic union of the head office in the financial center and its numerous branches in various parts of the country will, of course, substitute a radically different type of city-country relationship for the present more or less loose and informal arrangement.

Since the pyramiding of reserves and their unsafeguarded concentration in New York was regarded as an outstanding evil of the old system, the authors of the Federal Reserve Act sought to tear down or at least weaken materially the structure of inter-bank relations which had been reared over a long period.

Their visions have not been realized; New York continues to be the Mecca for the bank balances of the nation, with other local financial centers also wielding as great power as they did before 1914. The sweeping reduction in reserve requirements which accompanied the transfer of reserves to the twelve Federal banks has enabled bankers to keep the legal minimum at their Reserve Bank and still have large sums for deposit with a correspondent. The transfer of more than nine-tenths of the check collection business of the country to the Federal Reserve System has of course reduced to some degree the desirability or necessity of maintaining so large a balance with city correspondents.

In spite of the more attractive rates charged by the Reserve Banks for loans, country member banks continue to do a considerable part of their borrowing from other banks. Non-members, of course, have no choice in the matter. City banks, which did little borrowing in pre-Federal Reserve days, now rediscount freely at the Reserve Banks and are thus better able to lend to non-members and to those member correspondents who prefer to deal with them rather than with a Reserve Bank. This practice of continuing to borrow from a city correspondent at rates from one-half of one per cent to one per cent higher than those offered by one's Reserve Bank is probably due largely to the greater liberality of the correspondent with respect to the kind of paper offered and the length of the loan.

So long as the maintenance of a balance with another bank carries with it so many privileges and opportunities for profit, our unique correspondent system will continue to thrive, in spite of the fact that it is in competition with some of the services of powerful and efficient quasi-public regional banks.

6. The Bank and the Clearing House

We are not concerned here with the process of clearing checks. It is a simple, more or less mechanical, performance and involves no questions of public policy. Out of this association designed to perform so simple and obvious a function have grown, however, a number of other clearing house functions which do merit the attention of students of our financial institutions. It is but natural that when men meet for one purpose, other questions of mutual interest arise, and soon ways are devised to deal with them. Before long, if the originators are not restrained by the strong arm of the law, they may have resolved themselves into the regulatory body of the line of business to which they belong.

Some such evolution has occurred in the clearing house

association. The exchange of checks is today the least significant part of its operations, although still an essential one. The typical clearing house association regulates banking practice in its community. It lays down regulations as to the rate of interest to be paid on deposits, and prescribes the schedule of exchange charges. In some cities, the association attempts to control the loan and discount rates and to formulate general rules regarding the loan policies of members. In a few instances, the older banks constitute the association and refuse admission to the other bankers of the community, merely permitting them to use the association's clearing facilities on such terms as the members lay down. In certain other cities, the membership fees are so high that only the wealthier banks can belong, and the smaller institutions clear through them. Refusal of the clearing facilities is a powerful weapon in the association's hands. Through its use the regulations of the association can be enforced upon member and non-member alike. On the whole, however, the great power in the hands of these bodies has been used with commendable self-restraint and unselfishness. Wholesome competition has been maintained in most cities, in spite of the adoption of uniform rules and schedules of charges. In the long run, the cut-throat competition which these organizations have eliminated would prove disastrous to both the banker and his clients.

In order to see that their rules are enforced, and to know as nearly as possible how each bank's affairs stand, the clearing houses in a number of cities maintain examination departments. On the basis of the information obtained, wise counsel and material aid can be given to a member who is in distress. In this way, the danger of failure and the consequent wide-spread distrust of all the banks can be averted.

The so-called "money trust investigation" to which we referred in Chapter II included in its scope a thorough examination into the activities of clearing house associations. The

conclusion was reached that these bodies were guilty of certain abuses which should be corrected by state and national legislation. The report urged that all associations be compelled to incorporate, in order that their charters might be taken away if they refused to obey the law. It favored compelling the admission of "every solvent and well-managed bank" to full membership, and expressed hearty disapproval of the practice of fixing rates and charges. Little cognizance was taken of the investigating committee's findings. It seemed to be the prevailing opinion that such abuses as had grown up could best be remedied within the clearing organization itself. The public recognizes the wide difference that lies between the adoption of uniform rate scales and the existence of a hard and fast money monopoly. After all, however, such investigations if not conducted in a muck-raking spirit, serve a most useful purpose. Frequently there follows a taking of stock and an eradication of abuses by the groups which were the objects of attack. No action by either Federal or state authorities grew out of the money trust inquiry. The New York clearing house still remains unincorporated and associations the country over carry on in much the same fashion as before, but the thorough airing given to practices has served as a wholesome curb upon excessive interference with the freedom of the individual banker.

7. Loan and Investment Policy

We have observed that our traditional banking theory, as taught in the colleges, and expounded by writers on the subject, is an inheritance from England. It was developed at a time when the financing of foreign and domestic trade was almost the sole concern of the British banker. English industry still looks directly to the public for its financing, through the purchase of debentures and preference stock, but

the modern English joint stock bank is following a much more liberal and diversified loan policy than was portrayed in the writings of Jevons and McLeod.

Our banks, particularly the national banking system, copied the English "short-term commercial loan" notion of bank credit, and in spite of a considerable enlargement of the idea, and the grant of new powers from time to time, the whole spirit of our so-called commercial banking structure has been that of mid-Victorian England. The cardinal concept is that of liquidity. Loans should be made with reference to the financing of the flow of specific goods from producer to consumer. Such advances will be self-liquidating from their very nature, i.e., returns from the sale of the product which was the object of the financing will enable the borrower to meet the obligation when it is due. With the exception of their right to purchase national bonds and municipal warrants, the twelve Reserve Banks were limited in their lending and investment operations to this same so-called self-liquidating type of credit transaction. Unfortunately, the liquidation process becomes congealed in a period of depression, and even the Reserve Banks, particular as they are about their holdings, were caught with large amounts in "frozen assets" in the years following the crisis of 1920. Much as it might like to confine its lending operations to self-liquidating paper, the fact is that in the present-day bank such transactions are in the minority. The growth of time deposits at the expense of demand accounts has justified a decided increase in mortgage loans and long-term investments. Accommodation loans, both secured and unsecured, bulk large in the portfolios of bankers. The financing of speculation in the stock and commodity markets alone requires billions of bank funds for a type of transaction that is far removed from the old conception of a proper bank loan. Businesses obtain lines of credit without reference to a specific sale of goods, and although they are expected to,

and do ordinarily, "clean up" their bank loans, periodically, the whole process is a marked departure from the conception underlying our traditional commercial banking theory.

Both English and American bankers, the former with more deliberateness, are coming to the position long since taken by Continental bankers, viz., that it is a bank's function to finance all of the legitimate needs of industry and commerce, and to provide every type of financial service needed by patrons. A German bank, for instance, becomes a sort of partner in the enterprises of its patrons—not as American bankers do, after the business is on the verge of insolvency, but from its very inception. Capital is provided for building and equipping the plant, expansions are financed, and all current or seasonal cash requirements are supplied. Since a large share of its deposits is not subject to withdrawal on demand, its problem of liquidity of assets has not been so great as with us. If our present shift to time deposits becomes a permanent feature of American banking, our bankers will gradually assume a rôle similar to that of their German confrères.

With the development of this financial partnership, together with the broadening of the scope of banking activities, our orthodox ideas regarding liquidity must undergo a material change. The traditional conception of liquidity has been ability to meet current obligations by virtue of a wise timing of the maturity dates on loans. Today the banker has ceased to rely upon the proceeds of maturing paper and depends for the replenishment of his cash upon his ability to sell or pledge, instantly, a sufficient quantity of the loans and investments in his portfolio. In his analysis of the liquidity of national bank assets, Mr. W. F. Mitchell,[1] shows that during the six months ending November, 1920, when the great post-war crisis was upon us, national banks could not cope with the heavy demand for cash by relying upon maturing obli-

[1] *Uses of Bank Funds*, p. 64.

gations. They were forced to borrow heavily from the Reserve Banks or from city correspondents, to sell large blocks of securities, and to call in demand loans.

From time immemorial American country bankers have had difficulty in reconciling their loan and investment problem with that of our nineteenth century theories bred in England. Aside from a few loans to country merchants and an occasional accommodation to professional men and householders, the country bank has a clientele of farmers. The seasonal borrowings of farmers are seldom sufficient to enable the numerous country banks to earn a satisfactory profit. They have, therefore, made loans upon farm land and town properties. Until 1913, country national banks were at a decided disadvantage over those with state charters; for in nearly all of the agricultural states the provisions governing bank loans were much more liberal than those imposed by Congress upon the national institutions. The whole concept of the old national bank legislation was the financing of urban merchandising. Consequently, country bankers with national charters had to circumvent the law by maintaining loan offices, in which they took care of long-term accommodations.

Although all banks possess certain common characteristics, the problems of the country banker have assumed quite a different aspect from those of his city cousin. Most agricultural areas in the United States are rather highly specialized, and the bankers who serve them, therefore, have difficulty in diversifying their credit risks. Country bank borrowers in a cotton-growing region, for example, are accustomed to stake everything upon the prospects of that one crop, whereas in a typical city bank the various interests represented by borrowers make possible a much more satisfactory distribution of the lending risk. Moreover the urban bank does not encounter the marked seasonality in demand for credit that we find in country districts. A rural bank in the

cotton- or grain-growing regions lends most heavily in the spring to provide working capital for the season's farm operations. If the crop is sold as soon as it is gathered, cash begins to flow into the banks, and loans are cancelled if the season has been a successful one for the borrowers. But if the storage or holding of a crop has to be financed, in the expectation of a rise in the market, the condition of increasing loans and scarcity of cash may continue well into the winter. In addition, therefore, to being subject to the vagaries of a single product, or at best a limited group, rural bank loans run for a relatively long time, are highly seasonal; and if the crop situation is unfavorable, it is usually necessary to carry the obligation over into another growing season or to drive the borrower out of business by seizing his chattels. Well-to-do farmers can borrow upon their unsecured notes at rates which compare favorably with those granted to urban business; but those less favorably situated must secure the endorsement of persons of means or, as is nearly universal in the poorer sections of the country, must pledge the growing crop and chattels.

If crop conditions have made possible the payment of loans in the fall, the country banker has then to face a different problem, viz., that of much idle cash and little or no demand for loans. This requires the discovery of external outlets for these funds which will secure the largest return consistent with their safety and availability for use when the local needs for springtime credit have to be met.

A bank is under no legal obligation to finance every individual who decides to engage in farming in its community. So far as its right to do so is concerned, it could take in all of the deposits it could get, lend only to a select few in the community, and invest the balance of its funds in outside enterprises. No country banker, however, could continue in business on this basis. Every depositor is also a potential borrower. If loans were made only to the chosen few, de-

posits would also be largely restricted to the same group, and all of the bank's earnings would be consumed in overhead expense. It must extend all of the loans it can without unduly hazarding its funds. Herein lies one of the most compelling arguments for state-wide or even nation-wide branch banking. The little independent bank in a one-crop region, no matter how ably it is managed, has all of its eggs in one basket. If anything happens to the basket the bank will either come perilously close to insolvency, or, as thousands have done since 1920, become insolvent and go out of business.

In formulating its program of loans and investments at any given time a bank must take several factors into account. In the first place, it must scan the results of the day's clearings in order to see what its reserve position will be after the proceeds from a favorable balance are received or settlement has been made for an unfavorable one. If the reserve ratio is higher than the dictates of safety require, and there is nothing in the situation which would seem to demand unusual caution, the bank will lend or invest the excess in such ways and for such periods as its judgment of money market conditions dictates. If, however, an adverse balance at the clearing house leaves a deficiency in the reserves, it will have to call some of its loans, dispose of certain investments, or borrow from the Reserve Bank or a correspondent. American banking has developed a tradition against bank borrowing. Institutions in the less developed sections of the country did habitually appeal to the city bankers for funds for financing agriculture and other seasonal operations, but elsewhere it was considered more or less of a reflection upon the management. Bankers who felt compelled to borrow from city correspondents resorted to all sorts of subterfuges in order to obtain funds without having the item appear in their balance sheets, or having a customer discover that his note had been sold in some distant city. In order to circumvent the latter

contingency, borrowing bankers sometimes issued a blanket guaranty covering all of the paper sold to the correspondent bank. Others kept their government and other high-grade bonds in the correspondent's vaults and "sold" them to the city banker with the privilege of "repurchasing" them when the local seasonal stringency had passed.

The Federal Reserve System has done much to change the American banking attitude toward bank borrowing or rediscounting. Some of the old prejudice still exists among certain types of bankers, but the tremendous demand for bank funds in the boom period of 1917 to 1920, and the large addition to bank earnings which the rediscount privilege made possible, put the matter in a new light. If a bank seeks to borrow with the idea of extending its lending operations imprudently, or, if because of poor judgment, it has got itself into a thoroughly unliquid position, there should be a stigma attached to its resort to borrowing. If, however, legitimate seasonal or other out-of-the-ordinary demands tax its own limited facilities, its privilege and also its duty is to obtain additional funds from outside.

A second factor which must be taken into account in the formulation of a program of loans and investments is the relative amount of time and demand deposits. These two types of account are established by customers for two quite different purposes. The time deposit is a form of investment, but the demand deposit is created for present use. Its maker has in mind its service to him as a safe and convenient medium of payment rather than as an instrument for rainy-day saving. In a policy covering loans and investments the difference in activity between time and demand deposits will be an important matter. Roughly speaking, time funds will be invested in paper of slower maturity and less high liquidity, while ample liquidity will be provided in the employment of funds subject to withdrawal on demand. It must clearly be understood that in actual bank operation there

is nothing like a complete segregation of the two classes of funds, but changes in their proportion do have an important influence upon the character of bank investments. The recent decided shift toward time deposits, to which reference has been made, has been followed by a corresponding shift toward loans and investments of a more permanent type. In fact, study of the earning assets of banks in 1928 shows that two-thirds of the funds of so-called commercial banks are employed in financing more or less fixed capital outlays, while but one-third is used in financing the distribution of goods. As businesses have adopted, to an increasing degree, the hand-to-mouth method of buying merchandise, supplies, and raw materials, the volume of borrowing for the purpose of taking up trade discounts has been materially diminished. On the other hand, the farmer and the manufacturer are constantly substituting expensive labor-saving devices for hand methods, which means that a longer period must elapse before the object of the borrowing can be expected to repay the loan. It is not surprising then that in the short space of three years (1923 to 1926), for example, the percentage of member bank loans and investments eligible for rediscount decreased from 37.5 per cent to 30.98 per cent. The matter is so significant that it is well to repeat here what was said in connection with the subject of liquidity, viz., that our changed situation modifies considerably the problem of meeting the demand and maturing time obligations of a bank. With an increasing percentage of the assets invested in paper of slow maturity, the bank must depend for being "in funds" less upon a steady flow of self-liquidating paper, and more upon the hypothecability or salability of a certain adequate proportion of its assets.

A great deal has been said about the three C's—character, capacity, and collateral—the foundation stones of bank credit. Of late there has been a tendency to criticize our large independent and branch institutions for an alleged

disposition to convert themselves into glorified pawnshops, by reason of the fact that they were stressing collateral more than the small banker has ever done. One of the most frequently voiced objections to branch banking is that their credit risks are viewed in too objective and cold-blooded a manner. These critics of branch banking have imputed to the small independent bank an interest in the promising, but as yet inexperienced and impecunious young business man. The local banker is credited with far-sightedness and interest in the community, in offering him financial backing. No doubt there is some economic and social loss entailed in the somewhat more impersonal attitude of the large bank with respect to credit granting, but, after all, the large bank with its heavy overhead is eager for all of the desirable business it can get, and is not likely to deny any application which considerations of safety would warrant its taking. The appallingly high percentage of failures and ne'er-do-wells among business fledglings prompts us to believe that a tightening up of credit has been badly needed. The greater part of the funds of banks belongs to the depositors. No matter how much faith a banker may have in the future of an individual or firm, he is violating his trust if he lends on future prospects alone. It is perfectly proper for a well-to-do relative or other moneyed individual to run this risk, but the banker as the custodian of other people's money has no right to do so. Insistence upon adequate assets as security, therefore, is not only a reasonable but an essential requirement.

Thanks to the Federal Reserve System and some of the more progressive bankers, borrowers both old and new are being taught to conduct their affairs upon a more business-like basis. The insistence by the Reserve Banks that no note shall be offered them for rediscount, unless there is in the member's files a recent and satisfactory financial statement from the maker, has revolutionized the credit methods of country banks. Credit files are being maintained into which

are placed, for purposes of comparison, the periodical financial statements of customers, together with any other information of value in determining their ability and willingness to meet their loans. This is in striking contrast with the old method of depending entirely upon a borrower's unsupported verbal statement, supplemented by the banker's own personal "hunches" and impressions.

We have referred briefly to reserve position as a vital factor in the laying out of a bank's loan and investment program. If, for example, it is a country member bank, it is forbidden to create further deposit liabilities when its demand deposits are more than one hundred sevenths of its reserve account with the Federal Reserve Bank to which it is attached. It will have to increase its reserve by sending cash or its equivalent to the Reserve Bank or by rediscounting some of its eligible paper there, if it proposes to expand its credit. Further, it must provide for additional till money to meet the added demand for cash which additional loans are bound to occasion. A majority of the checks arising out of the new credit extension is quite sure to fall into the hands of customers of other banks. When these checks are presented for payment through the clearings, the bank must have the funds to meet the unfavorable balance. For this reason the bank is not warranted in extending its credit to the extent of one hundred dollars for each seven dollars it increases its reserve—unless by some chance all of the other banks with which it deals are doing likewise. If it alone expanded its volume of credit to anything like the full legal limit, it would be seriously embarrassed by the size of its unfavorable balance in the clearings. Dean Phillips [2] has shown that so serious a barrier is presented by this element as to limit the volume of new deposit credit that can safely be created to little more than one dollar for each additional dollar of reserve.

2 C. A. Phillips, *Bank Credit*, pp. 32 ff.

On the other hand, the volume of sound loans and investments available to banks usually shrinks to such an extent in a period of depression as to make it difficult to employ the excess funds. As a result, we find a surplus reserve of large proportions and correspondingly low earnings.

No matter how high the credit standing of any person or organization may be, the National Banking Act and the statutes of most of the states restrict the amount of accommodation granted to one name to a fixed percentage of the bank's capital and surplus. But no limit is placed upon the amount of commercial bills which a person may discount if he is their bona fide owner, since the law does not regard such paper as money borrowed. Undoubtedly the net result of limiting borrowings in this arbitrary fashion has been good. It has made for a wider distribution of risks and has prevented undue partiality toward the demands of a favored few. Businesses whose seasonal credit needs are much in excess of the prescribed limit are compelled to resort to several banks, and to supplement bank accommodation with the sale of notes through commercial paper houses. In closely owned corporations particularly, the principal owners frequently supplement the firm's maximum credit allowance with their own personal notes. In our discussion of branch banking we saw that the limit placed upon the amount of credit which can be extended to a single borrower forces the small independent into an unfavorable position in his competition with a branch of a bank with a loan limit of three or four millions of dollars per customer, for even in small communities there are located enterprises whose seasonal requirements mount into the hundreds of thousands. In spite of these difficulties, however, the sentiment of both bankers and the public is strongly favorable to the existing restriction. The funds will be much safer if the banker disperses the risk among a relatively large number of individuals. Furthermore, a business suffers no particular hard-

ship if its financial position must pass muster with several banks instead of one. The danger in the past has come from borrowers "playing" one bank against another and thus increasing their credit obligations far beyond the limits of safety. A remedy is being found for this in the greatly increased exchange of credit information. The excellent credit files of the Federal Reserve Banks and central credit bureaus have been valuable adjuncts to the more or less informal interchange of information between individual banks.

American banking has developed two important types of credit extension which are a departure from the English practice introduced by our forefathers. The first is the use of the short-term unsecured promissory note instead of the bill of exchange as the dominant instrument for financing the current requirements of merchants, farmers, and manufacturers. The second is the financing of stock market operations by means of the call loan, where the obligation is secured by a deposit of the stocks and bonds whose purchase gave rise to the borrowing in question. Our other methods of lending, such as the trade draft and time loan, secured by warehouse receipts, bills of lading, chattels, securities, or real estate, are not essentially different from those of Europe.

Since these two characteristically American loans bulk so large in our banking operations, they deserve some further consideration. As we have just indicated, the use of the unsecured promissory note for financing the short time requirements of industry and commerce is peculiar to the United States. In Europe, when a seller sends the invoice of a shipment of goods to the buyer, he accompanies it with a time bill of exchange which the buyer is expected to accept and return. It will thereupon be held by the seller or, as is more likely, sold to a bank or discount house and sent by the holder for collection when it is due. In pre-Civil War days our merchants resorted to this same time-honored procedure, supplementing it with the practice of the signing by the

retailer of notes, payable, in sixty or ninety days, to the wholesaler's order. The notes, as a general rule, were endorsed by the wholesaler and sold to a bank. Credit conditions after the Civil War became so chaotic as to give rise to a new practice which has since become deeply rooted in American business procedure, viz., the offering of a liberal discount for the payment of bills within a week or ten days after the receipt of the invoice. The rate of discount was so much greater than that charged by the banks for loans that it paid dealers to obtain the money from their bankers and pay cash for their goods. If a merchant's current credit position did not warrant his obtaining the necessary accommodation at his bank, he was carried on the books of the wholesaler or required to sign a note or to accept a draft. The two latter practices, however, had fallen into disuse prior to 1914 except in a few lines like the provision business, where the time bill persisted. With the passage of the Federal Reserve Act, as we shall see when we consider the influence of the Reserve System upon our banking policy, a persistent effort was made to substitute the time draft, or trade acceptance, as it is called in the Act, for the open book account. In fact, some enthusiasts would have liked to abolish our practice of offering discounts for cash payments. Deeply ingrained practices are hard to change, however, and the trade acceptance has not made the progress its proponents anticipated.

It can readily be seen why the superseding of the bill of exchange by the short-term note as the typical American business paper accompanied the change in sales finance. It must not be thought that borrowers had not been accustomed to give promissory notes to banks heretofore. There had always been a relatively large volume of such direct borrowing, but it had not been the customary method of financing the movement of commodities from producer to consumer. Furthermore, the security of additional signatures or the

pledging of property of some sort was rather commonly required. With the growth in volume of loans to be used in taking up cash discounts, and a general improvement in the character of merchandising practice, there was less insistence upon a deposit of specific collateral and more upon the indirect security involved in the general condition of the business as revealed in its financial statements and such other information as the bank could obtain. As was indicated earlier, however, the keeping of adequate accounts and the presentation of satisfactory statements needed the impetus of the Federal Reserve System to give them their present vogue.

Since 1920 there has been a relative decrease in the volume of loans needed to finance purchases by dealers. Hand-to-mouth buying and the marked decline in prices have effected marked reductions in inventories, and hence in the volume of this type of bank borrowing. The funds thus released are finding employment in stock exchange loans, and in financing the recent extraordinary development in the purchase of automobiles, radio sets, and other rather expensive articles of consumption, on the instalment plan.

The second outstanding form of short-term credit transaction in the United States is the call loan made to brokers on the stock exchanges, particularly in New York. On the European stock exchanges, settlements are made weekly, fortnightly, or even monthly; hence time, rather than call, loans are better suited to financing transactions.

On the New York Exchange, stock sold in the so-called regular way must be paid for the next day on which business is done. For the majority of the buying orders a broker executes, only a partial payment or margin is advanced by the purchaser. In such cases, the remainder of the purchase money must be advanced by the brokerage house out of its own funds or the proceeds of loans obtained by hypothecating securities upon which customers have deposited their margins or stocks and bonds owned by the firm itself.

How much a brokerage firm borrows on time, how much on call, depends largely upon stock market conditions. In the relatively quiet period preceding the World War, a brokerage firm customarily borrrowed about a third of its working capital upon collateral notes running from sixty days to nine months. In striking contrast are the figures of the feverish market of 1929, where on typical days ninety per cent of the total was obtained on a demand basis.

From the standpoint of a bank seeking employment for its surplus funds, a broker's loan is a most attractive type of earning asset. First, it is safe. Bankers and stock exchange operators have repeatedly stated that no bank has ever lost a dollar on loans made to brokerage firms operating on the stock exchanges. Be that as it may, one would never even venture to make so strong a statement regarding any other form of loan or investment. In the period of the World War and the years immediately following, considerable losses were taken even on holdings of Liberty Bonds when the prices of all securities sank far below their normal level.

In arranging a broker's loan, a generous margin is exacted, usually a minimum deposit of $125,000 in stocks and bonds, well assorted as to companies and lines of business, for a $100,000 loan. If the stocks are wholly those of industrial enterprises, a penalty is exacted in the form of a higher interest rate than would have been charged for a mixture of industrial and railroad collateral. So carefully is the process prescribed and safeguarded that the personal element has been eliminated from the negotiation and granting of the loan. In other words, both lenders and borrowers are entirely indifferent as to who obtains the loan, in one case, and who grants it, in the other. The loans are made only to stock exchange firms, all of whom, in view of the heavy investment required, have large financial resources.

Second, except for rare occasions like the autumn of 1914, call loans secured by stock exchange collateral have almost

perfect liquidity. Payment may be demanded at any time, and if it is not forthcoming the stock can be sold instantly on the exchange. Brokers' loans, always in amounts of a hundred thousand dollars and multiples thereof, are much simpler to acquire and dispose of than are numerous pieces of unsecured business paper of varying size and degrees of goodness. During the crisis of 1920–21, the country banker's stock market loans proved to be the most desirable earning assets he possessed. He converted them into cash, instantly, without a loss, whereas many deposits carried with correspondents became unavailable, for the time being at least, and many so-called self-liquidating commercial loans were solidly frozen. Much aid was extended by the Reserve Banks, but, as a matter of self-protection, they were compelled to deny further accommodation to over-extended banks, or at least to reject the paper of financially embarrassed bank customers.

Third, the yield on brokers' loans, while erratic, always compares favorably, of late years, with that of commercial paper, and is uniformly higher than the return on government bonds, and the interest rate has been decidedly attractive to lenders. The yield in 1927 was almost identical with the average for prime commercial paper, while in 1928 the call loan rate was consistently higher.

In spite of these various elements of attractiveness in the broker's loan, a large part of our population, including a considerable number of members of Congress and other public officials, regard it as an undesirable outlet for bank funds seeking investment. They consider speculation itself a more or less harmful practice, having little real economic justification. Consequently, when banks place any considerable amount of funds on the stock market, they believe that the so-called legitimate business interests—those of agriculture, commerce, and industry—are being cheated out of their full measure of credit accommodation.

Broker's loans, however, even at the unprecedented figure of more than six billions reached in 1929, represented but little more than four per cent of the total volume of loanable funds. Aside from a moderate stiffening of rates—amounting to less than one per cent in New York and averaging less than a half of one per cent in the rest of the country—accommodations to business did not feel the gigantic inpouring of funds into the stock market. Crop moving and other seasonal demands upon the financial system were provided for without strain. It is an unwritten law in banking to provide amply for the business clientele of the institution before placing money in the speculative markets. That this is carried out faithfully is evidenced by the fact that when a marked increase in business requirements occurs, stock exchange funds become scarce and rates rise.

One of the most striking phenomena of the recent stock market is the change in the relative importance of the sources of stock exchange money. In stock market and financial circles the following classification of sources prevails: (1) for New York banks' own account, (2) for account of out-of-town banks, and (3) for account of others.

Formerly the last-named classification, which is composed largely of corporations, individuals, and foreign banks, furnished a comparatively insignificant part of the funds loaned on Wall Street. Recently it has been the principal source of supply. The continued high rates for call money have been attracting a never-increasing flow of outside funds into the stock market. So far as the second source of supply, the out-of-town bank, is concerned, prosperous times and easy reserve requirements have increased greatly the possibilities of expansion, and consequently of profit, in the banking field. Security investments, real estate financing, and loans on installment contracts have absorbed some of the increase, but the array of advantages offered by the broker's loan in a great bull market eclipses the allurements of any other outlet. A

rural bank with all of its eggs in the agricultural basket finds the stock exchange an ideal place in which to invest its unemployed funds. It is obtaining an extraordinarily high yield and can call in its money whenever it is needed to finance the operations of the farmer. As has been pointed out previously, the whole process of making brokers' loans has become so impersonal that it can be carried through with a negligible amount of time and effort on the part of the lending bank or its agent, the New York correspondent.

The phenomenal growth of the third source, loans "for account of others," so far as the contributions of corporations are concerned, reveals some interesting recent developments in the field of business finance. Formerly the orthodox procedure was for a corporation to obtain its working capital largely from banks and commercial paper houses, and to confine its flotation of long-term securities to the securing of fixed or permanent capital funds. But the attractive rates at which security issues have been floated in recent years has led many corporations materially to reduce their customary lines of credit at banks, and to substitute bonds and shares for commercial paper. The proceeds in most cases were sufficient not only to pay the banker, to increase working capital, and to finance expansion, but to add materially to the liquid reserves. The latter have been the chief source of corporation loans on the stock market.

Some effort should be made to place the call loan upon the plane it deserves to occupy. Whether or not the man on the street can be satisfied that organized speculation in stocks is economically and socially justifiable, the volume of transactions will continue to increase. The million share day which, but a few years ago, won a place on the front pages of our newspapers, has been superseded by five and six million share days. Even though there should be a considerable decline in security prices and a reduction of the speculative fever, there will be a steady growth in the normal volume of specu-

lation in securities. That being the case, we should face squarely the desirability of placing the brokers' loan upon a more stable footing.

Its present instability has a disturbing effect not only upon the stock market but upon the rates for other types of paper. As long as it is regarded merely as an outlet for surplus funds, the stock market's supply of money will always be hampered by uncertainty, with a consequent fluctuation in rates. When business is brisk, speculation is apt to be the most active. But since this briskness on the part of business requires a larger volume of credit, a strain is thereby put upon the call money market. Much of the instability of the American broker's loan situation could be obviated by the substitution of the European fortnightly settlement for our daily settlement plan. The European broker can tell accurately in advance of settlement day how much borrowed money he will require. This postponed settlement and an effective clearing system combine to reduce a broker's requirements to modest amounts. Postponement of settlement, however, is conducive to failures on the part of brokerage houses in times of a crisis in the stock market. If we resorted to it, we should have to surround it with more adequate safeguards than have been set up in foreign countries.

In spite of the rather liberal definition of business paper formulated by the Federal Reserve System, less than a fifth of the paper held by New York member banks at recent calls from the Comptroller was eligible for rediscount. Comparing this amount with their holdings of paper secured by stocks and bonds would lead one to conclude, offhand, that the New York banks would have to depend for their liquidity upon the stock exchange rather than the Federal Reserve Bank, and that a crisis on the stock market might play havoc with their condition. A closer investigation will show, however, that the average amount of eligible paper on hand since the post-war crisis of 1920–21 has been some ten times the

amount actually borrowed from the Reserve Bank, so that a distinctly safe margin exists to which resort can be had if the broker's and investment house loans ever do become "frozen."

A banker of the old school would be horrified at the growth of real estate loans in the portfolios of commercial banks of today. This field was formerly considered the province of the savings bank, the insurance company, the building and loan association, the mortgage company, and the private lender. As we have seen, national banks, especially in small communities, have always been handicapped by the prohibition against loans on farm and city property. This has been greatly accentuated with the decided increase in their non-commercial deposit accounts. State banks, as a rule, have always been accorded somewhat greater freedom, with the result that the national system suffered materially from the unequal competition. The original Federal Reserve Act of 1913 granted some relief by permitting national banks outside of central reserve cities to lend on farm land within their own Reserve districts for not longer than five years, provided the amount of such loans did not exceed a fourth of the bank's capital and surplus, or a third of its time deposits. As the banks came to utilize this new privilege, it was found that their soundness and liquidity had not been impaired; so Congress was easily prevailed upon to extend the privilege to one-year loans upon urban property. But still the state banks and the trust companies in most commonwealths were enjoying much greater freedom and the business of the national banks suffered accordingly. In recognition of this condition, there was incorporated in the McFadden-Pepper Act of 1927 a liberal revision of this portion of our national banking laws. Henceforth, any national bank may lend upon any form of improved real estate, city or farm, situated within one hundred miles of the bank's location. Both types of loan can now be made for a period of five years.

The limitation of the total volume of such loans is placed at a fourth of the capital plus a fourth of the surplus, and not to exceed a half of the bank's savings deposits.

The more conservative bankers of the country have expressed serious misgivings as to whether, in our efforts to place national banks upon an equal footing with state banks and trust companies, we have not seriously impaired their liquidity. It is true that there is no central or regional bank where mortgages can be rediscounted in case a bank needs cash, nor is there a mortgage exchange where these obligations can be sold like stocks and bonds. Embarrassed bankers have induced farmer borrowers to transfer their farm loans to a Federal Land Bank or to one of the state rural credit systems, but this process is so indirect and uncertain of achievement as not to constitute a dependable source of relief. If, then, a banker does hold a disproportionate amount of real estate loans in his portfolio, he will surely find himself in a most embarrassing position if he is subjected to sudden and extensive calls for cash. The limitations placed upon bankers by our national and the more enlightened of the state laws, together with the dictates of common sense, should prevent the tying up of an unsafe proportion of the assets in mortgage loans. Congress has used moderation in attempting to solve the difficulties of the national banks with respect to long-time lending. It has recognized to a like degree the desirability and the danger of this type of credit extension.

If the mortgage loan business of national banks turns out badly, much of the blame will attach to the work of the persons who appraised the value of the property offered as security. The national statute and those of most states restrict the amount of the loan to not more than fifty per cent of the true value. At best, this is difficult to determine with a high degree of certainty. With the great competition that exists in this field, valuations are frequently inflated. Particularly is this true in time of a business boom. Property

which normally sells for $10,000 will find a ready market at twice that amount. When the slump comes, values often drop to less than the pre-boom level. In fact, the property frequently cannot be sold at any price. If a loan of ten thousand dollars is made on this property during the boom period, the bank will later find itself in a serious predicament. The past decade has furnished us with hundreds of examples of bank failures growing out of such situations. Another weakness of the mortgage loan lies in the over-generous treatment of borrowers by some of our states. They have granted so many exemptions and have given the mortgagor so long a time in which to redeem foreclosed property that mortgages in those states are a questionable form of bank investment.

The development of the Federal Farm Loan System with its amortization plan covering a long period of years, and its low rate of interest, has turned a lion's share of the farm mortgage business to the Federal Land and joint stock banks. There will, however, continue to be a demand for the shorter term loans of banks. The urban property loan business continues to be a safe and lucrative outlet for time funds, in spite of the spirited competition with the building and loan and insurance interests.

The gradual supplanting of the small producer and distributor in this era of mergers, chains, and consolidations has been bringing about a change in bank loan and investment policy. The big business unit is able to secure large sums directly from the public on favorable terms, shorn of twenty per cent balance requirements and the necessity of a periodical cleaning up of the indebtedness. Likewise, its large accumulations of cash during certain periods are no longer left as demand deposits, drawing two per cent interest, but are invested in bankers' acceptances, certificates of indebtedness, call loans, and marketable securities. The open market facilities created by the Federal Reserve are thus coupled with

the stock exchanges in affording a varied and at the same time highly liquid list of uses for idle funds.

The banks continue to serve the capital needs of corporate enterprise, but there has been a shift in the channels and methods employed. Less is being advanced over the counter in the form of direct accommodation, and more is being loaned through the investment by the bank in the corporation's paper and securities.

As time deposits come to form a considerable part of the bank's liabilities, with the small reserve requirement needed and negligible supply of till money to meet withdrawals, a long-term investment security with a ready market forms an ideal outlet for these funds. The care and time involved in making frequent short-term loans are obviated.

Two phases of this present development in banking, however, go contrary to the best interests of the Federal Reserve System as it was originally conceived. One is the substantial reduction in the reserves carried with the Reserve Banks, as time deposits constitute an increasing part of the accounts of customers of member banks. The other is the growing inability of banks to avail themselves of the rediscount privileges afforded by the Reserve System, as the proportion of non-eligible loans and investments mounts.

8. The "Extra-Banking" Functions of Present-Day Banks

In their effort to keep pace with the trust companies and to increase their volume of business per dollar of overhead expense, the banks have gone far beyond the orthodox conception of banking functions. Unlike department stores, whose freedom from legal restraint permits them to do almost any sort of merchandising business at will, the bank has to undergo a campaign of education and political strategy in order to add a single power to its carefully prescribed list. In a state like Illinois, where all acts of the legislature per-

taining to banks must be submitted to the voters, and generally fail because not enough persons vote upon them, it is well-nigh impossible for a state bank to keep abreast of the times.

Most of the new powers and functions acquired by the banks in recent years are quite simple. For example, the right given smaller national banks to sell real estate and act as agent for insurance companies does not involve any serious complications. Almost every community contains persons who can perform either or both of these functions successfully. When it comes, however, to the exercise of trusteeship and its related powers, the personnel problem is rather a serious one.

In order to place proper safeguards about the exercise of the recently granted fiduciary group of functions, the Federal Reserve Act provides that the Board shall draw up a definite and comprehensive set of regulations governing the exercise of such powers. Furthermore, before a bank can set up a trust department, it must be favorably recommended by the Reserve Agent in its district, and receive the formal consent of the Board. The latter has the right to revoke such permission if the bank does not live up to all of the national and state regulations governing fiduciary services. One of the most fundamental of the Board's regulations is that the funds, records, and investments of the trust department be kept absolutely separate from those of the bank proper.

The whole law and practice of trusteeship are so complicated that the ordinary banker is not fitted to render competent service in this field. He will have to place one or more trust officers, preferably men trained in the law, in charge of this work. Here again the large branch banks have somewhat of an advantage over the small independent units, for the services of a large staff of specialists at the head office are available to the most remote patron. In order to meet this situation, independent banks in California are entering into

a coöperative arrangement with large non-branch institutions in the urban centers whereby they are able to avail themselves of the facilities of a thoroughly equipped trust department.

In spite of the inexperience of many smaller national banks which have undertaken single-handed to develop trust departments since the Federal Reserve Act first granted this power, the interests of the various types of beneficiary have not suffered, inasmuch as the supervision of the state authorities and the judges of probate extends to the trust departments of national banks as well as those chartered by the state, and a department's actions have thus undergone a three-fold scrutiny. Nevertheless, some of the banks have found the effort a discouraging one. Banks located in county seats have naturally fared much better than those less strategically situated, but persons of moderate means form practically the entire clientele of smaller banks, and this class has not become habituated to placing its affairs in the hands of corporate trustees, guardians, and executors. The small-town lawyer has relied for his livelihood to a large extent upon just such services, and he will not see his business slip through his fingers without offering spirited opposition. Unless a bank applying for permission to perform fiduciary services seems likely to have a sufficient volume of business to justify the employment of a properly trained trust officer, it would seem to be in the public interest as well as that of the bank itself for its application to be denied.

Thus we see that bank management is undergoing a constant process of evolution. The department store idea is permeating American banking to its smallest unit. Changes in business practice have brought about corresponding modifications in the organization and administrative policies of banks. Old functions are being performed in a different way and new ones are constantly being added. In order to justify these changes it is not sufficient to demonstrate that

the profitableness of banking is increased without added cost or sacrifice of the quality of service rendered. The public has a right to share in the benefits of banking progress, if such it be, by way of lower costs and improved facilities. The old specialized trust company and savings bank rendered a high type of service to their clients. We shall be taking a distinct step backward if these departments of our modern financial department stores do not maintain the same level of excellence.

BIBLIOGRAPHICAL NOTE

R. G. Rodkey, *The Banking Process* (New York, 1928), R. B. Westerfield, *Banking Principles and Practice* (New York, 1924), and L. H. Langston, *Practical Bank Operation* (New York, 1921), cover the whole field of bank management in a discriminating and critical fashion. J. D. Magee, *Materials for the Study of Banking* (New York, 1923), presents phases of the subject not available in the regular treatises.

C. A. Phillips, *Bank Credit* (New York, 1920), has made a thorough-going analysis of credit extension. In a series of articles entitled "Commercial Banking and Capital Formation," in Volume XXVI of the *Journal of Political Economy,* H. G. Moulton has made an important contribution to the subject of liquidity. W. F. Mitchell, *The Uses of Bank Funds* (Chicago, 1925), deals effectively with the whole problem of loans and investments.

The duties of bank directors are fully set forth in F. L. Major, *Duties, Responsibilities and Liabilities of Bank Directors* (New York, 1925).

L. L. Watkins, *Bankers' Balances* (Chicago, 1928), presents an exhaustive study of the problem of interbank relationships.

CHAPTER IV

PUBLIC REGULATION OF BANKING

1. The Antecedents of Bank Regulation

Public regulation of private business is seldom undertaken merely for the sake of regulating something, or in anticipation of some possible future ills. Almost without exception, it is provided in response to a demand for the eradication of ills, real or imagined, from which the public believes it is suffering.

In the field of banking and currency, in spite of many occasions for remedial action, changes in law and custom have been relatively slow. The public has an attitude of sensitiveness and conservatism toward experiments with the mechanism of exchange, and seems to prefer to endure the imperfections of an existing situation rather than to face the uncertainties of change.

Bankers, to a large extent, are carrying on their business with other people's money, and naturally ought to expect to have more safeguards thrown about their operations than do the merchant and manufacturer. Transactions in every line of business, moreover, depend implicitly for their consummation upon the existence of an adequate supply of money and deposit credit. No matter how assured the ultimate solvency of banks may be, if they cease to function properly for but a brief period, industry and commerce are paralyzed. A striking example of such a condition was furnished by the

panic of 1907, when, because of our defective currency system, banks were forced to suspend cash payments and business was thrown into chaos.

Like their European models, the earlier banks of the United States were subjected to little regulation and practically no supervision. Some of them, like the Bank of New York, the Bank of North America, and the Bank of Massachusetts, lived up to the best existing standards of banking, and incurred little criticism, so far as the safety of depositor's funds and accommodation of business were concerned. What difficulties they had arose from their connection with partisan politics in the process of securing their charters. This latter fact, coupled with the unfortunate experience of the colonies with paper money issues, public and private, compelled them to share a rather wide-spread prejudice against money institutions; but it did not lead to a demand for their regulation. A pioneer agriculturist has many wants and few means of supplying them. What specie he brings with him soon departs in payment for much-needed supplies and equipment. Pioneer communities seldom contain persons who have a clear and adequate comprehsion of what a bona fide bank is and how it functions. It is therefore not difficult to win their approval for projects designed to provide generous issues of currency, even though they are not safeguarded by adequate specie reserves and other measures for insuring their security and parity. Each section of the country has had somewhat the same experience in its early days—an epidemic of so-called banks of issue, emitting a large volume of irredeemable currency and lending it freely upon doubtful security. Eventually, when the peak of inflation is reached, the crisis comes, the currency issue collapses, and the community is ruined. Then follows an intense prejudice against banking institutions, good, bad, and indifferent. A man who struggles with crude implements to subdue the rocky woodlands of New England or the unbroken prairies farther west, easily

acquires a contempt for and a suspicion of "white collar" institutions like banks. Once he has acquired it, any unfortunate personal relations he may have with any enterprise operating under the name of bank make him a lifelong enemy of financial institutions. Fortunately for the three banks we have named, they were situated in urban communities and had little direct contact with impecunious farmers.

Nevertheless, when bank regulation and supervision came, it had its origin in the pioneer's sufferings from the abuses of bad banking schemes and in the attitude of all men who worked at hard physical labor toward those who did not.

Inconsistent as it may seem, proposals for issuing more money or lowering interest rates as well as those designed to curb the powers of banks receive their warmest support from the same group, viz., the less prosperous agricultural regions. Capital tends to be scarce and money rates high in these sections, not only because of greater uncertainty as to the outcome of a season's operations, but because of the absence of accumulated wealth. The lending classes and institutions of the older states find abundant employment for their funds in well-established industrial, commercial, and agricultural enterprises nearer home.

In a later chapter we shall see how government has intervened in an effort more nearly to equalize money rates in every part of the country and in every class of borrowing.

2. The Peculiarity of the Bank Regulation Problem in the United States

The three banks we have just discussed, together with the two United States Banks, were founded upon a "silk stocking" idea of banking which had prevailed in the mother country and, in fact, still obtains in most of the world. Its underlying assumption is that banking is a calling not designed for everyone who might choose to enter it, but is more

or less set apart for the select few, whose training, wealth, and social position qualify them. Herein lies much of the explanation of the absence of regulation in Europe and in the early period of our own history. It was not until the common man's right to become a banker received recognition and banks began to spring up like mushrooms that reliance could no longer be placed in the ability, pride, and resources of a banking class as adequate guaranties of safety. Once the *laissez-faire* attitude was discarded in American banking, public control became more and more elaborate, until it has gone to lengths unheard of in any other part of the world. It is no reflection upon the inherent honesty or capacity of the rank and file of our people that such is the case. It is merely the result of our applying the doctrine of equality of opportunity to the profession of banker, and of lowering the financial and other requirements to the point where large numbers can avail themselves of it. And so, instead of a small number of "silk stocking" branch banks we find ourselves counting banks by the thousands. Their capital and volume of business are usually very small, and lack of training has not constituted a barrier to entrance. Despite what has been said in criticism of the action of a group of uncontrolled private bankers in New York, our greatest problem has been, and continues to be, the elaborately regulated and supervised independent state and national banks, especially those with the legal minimum of capital stock. They flourish in days of prosperity and vanish in large numbers in periods of depression.

Not only was a difficult task of regulation forced upon the public authorities by our "equality" idea of banking, but we further complicated the problem by setting up two sets of competing and overlapping jurisdictions with no central leadership. The Congress of the United States and the legislatures of forty-eight separate commonwealths proceed in virtually complete independence of one another to enact laws

for the regulation and supervision of American banking. While the national laws and those of the several states have borrowed freely from one another, and the general structure of the associations operating under them is much the same, wide diversity still exists with respect to some rather vital matters. The systems of some of the states are easily on a par with the national system, while others are operating under ill-advised measures and mediocre supervision. While a central leadership was provided in the shape of the Federal Reserve System, its effectiveness is impaired by the multiplicity of jurisdictions through which it must act, as well as by the fact that membership in the System is voluntary for the state banks, only the minority of whom have availed themselves of it.

The far-sighted Hamilton, at the very beginning of the nation, paved the way for a constructive banking leadership in founding the First Bank of the United States. In spite of their most unfortunate involvement in politics, both this bank and its successor, the Second Bank of the United States, exercised throughout the country an influence in behalf of sound banking. In fact, the discipline meted out by them in their efforts to enforce proper standards had a part in their undoing. The aggrieved state and private bankers won the sympathy and support of the dominant political party and so impressed upon American thought the evils of central banking that it was not until eighty years later that such leadership could be reestablished. Even then, central banking had to be camouflaged under a system of regional banks with a central board over them.

Progress in banking safety and efficiency, then, has to be made in the face of a myriad of banking units, a multiplicity of overlapping jurisdictions, and a distinct prejudice against anything more than a colorless leadership on the part of the central banking organization.

3. Regulation by the States

As has been pointed out in a previous chapter, the first banks chartered in the United States were creatures of special laws. So long as the party with which they were affiliated was in power, they were protected from the creation of new competitors. Consequently, persons who were not in political favor could not engage in banking until such time as their friends were in the legislative saddle. In New York, a political situation developed which was destined to make a profound impression upon American bank regulation. In 1835, a split in the ranks of the Democratic party resulted in the formation of the Equal Rights faction whose platform contained a vigorous declaration against special charter banks. Through coalition with the Whigs, control of the legislature was obtained and the free banking law, with which we have already dealt in another connection, was enacted. One by one, the various states have followed the lead of New York until but one commonwealth, Delaware, still adheres to the special charter system. In framing the National Banking Act, Congress also followed the New York plan. Canada continues on the special charter basis, but European countries have carried the idea of simplicity in bank incorporation even farther than the United States has done. They have not even set up a special procedure for the incorporation of a bank. A simple set of requirements has been enacted covering every form of business incorporation. It is pertinent to note that substituting a general incorporation scheme for special charters does not necessarily mean that a country will be flooded with banks. It did have that effect in the United States, more because the change in method of starting business was accompanied by a tempting arrangement for issuing paper money and a repudiation of the silk-stocking exclusiveness associated with banking. No such incentives lead the man on the street in Europe to

start a bank, so with all their ease of incorporation, banking is even more highly concentrated there than it is in Canada.

The essence of free banking is that a prescribed minimum number of persons, by complying with certain specified provisions, can obtain a banking permit from a designated state official. Since out of this ease in financial venturing there has come a large number of relatively small banks, owned by persons of slender resources, it has forced upon us a most elaborate program of public regulation.

In a work of this sort, which concerns itself with only the more general aspects and outstanding tendencies in our banking development, we cannot consider forty-nine systems of regulation in all of their details, but shall have to content ourselves with ascertaining what characteristics are sufficiently common to warrant our singling them out as representing American regulatory policy.

It is the custom among our states to segregate in a separate office the duties attached to the chartering, examining, and supervising of banks. The official in charge is known by various names, but for convenience we shall refer to him by a commonly used title, superintendent of banks. He is customarily appointed by the governor and is removable at his pleasure. This arrangement is significant, for it tends to make a political plum out of the office, and yet it has its wholesome side, for its centers upon the governor a responsibility for the competent and scrupulous conduct of his appointee's office. In the few states where the superintendent is elected, the public have been no more discriminating in their choice of men, and the chief executive has not felt any particular responsibility for his banking department's standards. The tendency now is to make the office appointive but to remove it somewhat from the midst of political turmoil by making the term longer than that of the governor. In states with a biennial term for the governor, the prospect of a

change in bank department policies every other year certainly is disquieting.

Most states specify that the superintendent must have been an experienced banker. This seems like a wise safeguard, but experienced bankers with a really statesmanlike grasp of banking problems are seldom willing to accept a banking superintendent's position. The ordinary banker appointee will be inclined to look at his position as superintendent through a bank officer's eyes, instead of from the standpoint of the public interest. Some of our ablest executives have completely lacked training in the routine of a certain calling or post, but they were able to acquire a satisfactory knowledge of the problems of the organization, within a short time. On the other hand, no matter how long an experience some persons have had in a given field, they are never able to deal with its problems in a broad way.

The salaries of the majority of bank superintendents are so low as to necessitate either appointing men of independent means, or as is more often the case, procuring the services of officials with the point of view of a high-grade employee rather than an executive. It would be equally unfortunate to have to confine the appointment to men of wealth; for, honest as they may be, they do not always fully sense the point of view of the person of small means. At present, salaries vary from $3000 to $10,000, with only California, Pennsylvania, and New York paying the maximum. Most states pay in the neighborhood of $4000. In this day of huge banking units, bank superintendents of large calibre are needed to cope with the intricate problems which new conditions present. Normally, the services of such men cannot be had at the wage of a skilled artisan.

One of a superintendent's most difficult problems is to keep informed adequately both as to general banking developments and as to how the individual institutions under his supervision are conducting their affairs. In a thinly popu-

lated state like Nevada, where one examiner can keep his superior well-informed as to policies and conditions in the little group of country banks under his jurisdiction, and the superintendent himself could easily form a personal acquaintance with every bank official, the problem is relatively simple. This does not mean that even the best Nevada superintendents will be able to ferret out every dishonest or ill-advised act, but they are in a truly enviable position compared with a superintendent in a state like New York, where a single examination of a bank or trust company requires the services of a large staff for days. What is needed, evidently, is to use every possible device in the way of method and term of appointment and divorcement from other governmental functions to free the position of state superintendent of banks from politics. This having been done, the public must be educated to the necessity of paying a sufficiently high salary to attract an experienced administrator of great ability and independence. A man of such calibre could be entrusted with large powers in respect to the chartering of banks and their subsequent regulation.

With a few notable exceptions the examining staffs of our state banking departments have been inadequate in number, poorly paid, and chosen as a political reward rather than for their peculiar fitness.

The national banking system, while far from ideal in respect to its staffs of examiners, has set a pace which the states could well afford to emulate. Its examiners start at a salary of $2400 and through merit can advance to $7500, or even more, if the position of chief examiner for each Federal Reserve District is included. The national civil service rules prescribe a definite and adequate list of requirements, including a comprehensive examination.

In the states where the examining force has been selected on the basis of merit and retained through the payment of living salaries, they have developed a commendable degree of

efficiency in detecting irregularities and evidences of bad judgment on the part of bank officers and employees. The detailed reports submitted by them have been studied with great care by the superintendent and his deputies, and wholesome advice and timely admonitions have been forthcoming. During the extremely trying period following the crisis of 1920, state bank department staffs rendered conspicuous service in their efforts to save from bankruptcy banks which were loaded with frozen assets.

On the whole, however, we are disposed to expect too much, even from the very best of the state banking departments. Rarely is it feasible to examine a bank oftener than the once, twice, or three times required by the respective state laws. Even if a public examination could unearth all of the innermost secret doings of every officer and clerk, much can happen in the interval between inspections. But from the very nature of the case, bank examinations have their serious limitations, and frequently do not reveal certain unwholesome, or perhaps criminal, practices. In fact every now and then, even in well-managed metropolitan banks, it will be found that the president or some other officer has been misappropriating the bank's funds under the very eyes of his associates. The examining staff members are strangers in nearly all of the communities they visit; hence they find it extremely difficult to unearth frauds or evidences of poor judgment when they look over the names attached to borrowers' notes.

Most of our states are not yet getting from the banking department all that it can reasonably be expected to give, in the way of protection to bank creditors. That portion of their codes which deals with the state banking department should be more comprehensive and, at the same time, more definite. Salaries should be provided which will command the services of a high-grade staff. Adequate requirements should be prescribed for the position of examiner and selec-

tions made on the basis of competitive examinations. Too many young examiners of real promise become discouraged over the lack of future in the position and gradually come to regard it as an opportunity for looking about for a good berth in some bank.

What we have said with respect to the state superintendent and his examiners applies with equal force to the type of receivers appointed to liquidate defunct banks. If the poor depositor is to salvage anything out of his account in a failed bank, the liquidation process must be placed in the hands of an expert, who will not only salvage every possible dollar of the assets but will pare his expenses to the bone, and will courageously undertake to recover from the stockholders as much of the deficiency as their obligation of double liability will provide.

It should be said, however, that no matter how vigorously a receiver may pursue his collections under this provision, experience shows that rarely is an amount equal to the full par value of the capital stock obtained. As we noted in an earlier chapter, the same situation that brought ruin to the bank has frequently impoverished its prominent stockholders.

In addition to the detailed findings submitted by examiners, it is customary to require banks under state charter to submit their own report of condition, one or more times a year, as of some date unknown by the banks in advance. Of late years, in order to secure comparable statistical data, and possibly to prevent kiting of items between state and national institutions belonging to the same interests, it is customary for the national and the several state departments to agree as far as possible upon common call dates. Although these reports are by no means a preventive against fraud and incompetency, they serve in connection with the findings of examiners as a basis for criticism and constructive suggestion. A common requirement imposed upon banks is the publication of their reports in abbreviated form, in one or more local

newspapers. The great majority of bank patrons never reads these statements, and, if it did, would be unable to form a trustworthy judgment as to a bank's real condition; but when they are compared carefully with the same institution's previous reports, and with those of similarly situated banks, they do at least reveal general trends in policy.

We have already seen in connection with our study of the policies of internal management of banks, how relatively little American law makers leave to the judgment of bankers and supervising officials when it comes to certain important matters of policy. In most European countries, a brief statute, covering a page or two, would be considered quite sufficient for the establishment of a whole new system of some sort, because the details would be left to the administrative personnel. When we, on the other hand, set up some new enterprise by statutory enactment, we usually prescribe in detail the conditions under which it shall be organized, operated, and supervised.

Most of the states have encouraged inefficient banking by permitting institutions to begin operations with a very small capital. In one state but $5000 is required in places having a population of 1500 or less. A minimum of $10,000 is altogether too common in our state systems. Even with the addition of a required surplus of twenty per cent, the total proprietor's investment, which stands between the depositor and the loss of his funds, is pitifully meager in small banks. So small a minimum figure encourages the formation of too many banks. A typical thinly settled agricultural county in a state with lax requirements will have a bank to each 150 to 200 inhabitants, practically all of whom are persons of slender means. Since each bank is an independent unit, it will have to carry a heavy overhead per dollar of deposits, and will have to take relatively large chances with its funds in order to pay living salaries and return a satisfactory dividend. Now that the automobile and

good roads have made the chief towns of the average county accessible to every corner of the outlying territory, a much higher minimum capital stock requirement could be enforced without depriving small communities of banking facilities. The few banks which remained ought also to be allowed to establish branches in parts of the county where the volume of business warrants.

It has not been customary to give the superintendent of banks discretion in the matter of granting charters to applicants who have complied with the formal list of requirements, but a properly qualified superintendent should be accorded a large measure of leeway. A thorough and unbiased investigation of the needs for additional banking facilities in the proposed location of an applicant for a charter, as well as the character and fitness of the institution's sponsors, would have prevented our overbanked condition and saved us from much loss and suffering. The Comptroller of the Currency has such discretion relative to the formation of national banks and utilizes the district examiners' offices to aid him in making a decision. The national banking system is entitled to no halo, however, for the Comptrollers' decisions have not always been free from personal and political influence. If only the central supervising authority could and would study an application in the light of the worst possible conditions likely to befall the community in question, instead of accepting the rose-tinted pictures of promoters regarding paper prospects, America's record of bank failures would be tremendously improved. The professional organizer or promoter has been responsible for much of our bad showing. He receives a generous commission for selling the stock of a new bank, and consequently the more of them he can establish the better he fares. A few of the legislatures have had the courage to put an end to the practice, by requiring banking departments to deny a charter in case any commission or fee was paid for the sale of stock.

In our study of internal policy, we noted that the specification of a given minimum reserve is a universal protective device employed in the public regulation of banking. Outside of our rapidly vanishing private banks, we have never trusted the matter of the amount and location of this minimum to the banker's judgment. With the improved facilities afforded by the Federal Reserve System for the conversion of earning assets into cash, Congress felt safe in making material reductions in the amount of reserve required. In order to relieve state member banks of the necessity of maintaining two sets of reserves, and to relieve state banks generally of the competitive handicap imposed by the more liberal national requirements, legislatures for the most part followed the lead of Congress and substituted greatly reduced percentages for the old requirements. As we observed earlier, prescribed reserves are of real value only as danger signals. The name *reserve* is more or less misleading. It gives the impression of an emergency store that can be utilized in case of need, whereas banking law and practice have made of it something that one is forbidden to encroach upon; or, as in the case of the Federal Reserve, if it is encroached upon, a progressive penalty must be paid. Where adequate rediscounting and other liquidation facilities are available under all conditions, the public authorities need to concern themselves little with the cash reserves of banks and more with the eligibility of earning assets for immediate conversion in case cash is needed.

Statutory restrictions alone, no matter how stringent, can never prevent or offset the consequences of injudicious banking. Placing a limit upon the amount that can be loaned to a given borrower, prohibiting loans upon the bank's own stock, and restricting the amount of the bank's funds which can be loaned upon real estate and farm land, do not guarantee the quality of the loans and investments a bank is free to make; but in our system of banking we would have been

utterly ruined long ago if we had not enforced with a legal club principles which in a small group of ably managed and financially powerful banks would have been applied as a matter of enlightened self-interest.

The states which are in the vanguard with respect to their statutory requirements and the quality of their supervision have by no means solved the problem of safe and efficient banking; for, in the last analysis, the safety and efficiency of banks depend upon capacity of management and command of material resources. The best state banking department ever created cannot operate the banks for their owners. It has to accept along with the strong enterprise those that are on the outer margin of public tolerance, and must do the best it can to keep them in the straight and narrow path. The rest of our states, unfortunately the majority of them, need to raise their standards very materially before their machinery of regulation and supervision can afford to their bank patrons even that limited degree of protection which can reasonably be expected from it.

4. National Supervision

The right of the Federal Government to create or regulate banking operations had been upheld in the case of the two United States banks, but there was no disposition to exercise this prerogative so long as the Democratic Party controlled our national affairs. It was not until the exigencies of Civil War finance seemed to the Lincoln administration to dictate such a policy that the national government again entered the field. From the standpoint of public regulation there was much to be said for the Federal Government making an effort to improve the banking situation. As was indicated in an earlier chapter, the various states had copied the New York free banking plan; but whereas New York had by successive amendments eliminated the weaknesses in the orig-

inal project, some of the newer states copied it, weaknesses and all. When the war broke out, there were wholesale bank failures. Consequently, the time was propitious for a new system under national supervision with a uniform currency that would tend to displace the motley assortment of state bank notes. The New York system was at this time thoroughly sound and respectable. Furthermore, it fitted in well with the principal object the sponsors of the new national system had in mind in launching it. They wanted to create an artificial outlet for government bonds. If a group of persons would buy $50,000 or more they could start a national bank and could issue their own paper currency up to ninety per cent of the value of the bonds. In order to create more interest in the project than was at first manifested, Congress three years later gave a monopoly of all bank note issues to national associations by imposing a tax of ten per cent on the issues of state banks. With a huge war revenue to collect, a bad market for bonds, and vast disbursements to make, the Treasury could scarcely be blamed for putting its own exigencies ahead of the mere idea of providing a new set of independent banks and the accompanying regulative machinery. Furthermore, a strong feeling existed to the effect that a uniform national currency would promote a feeling of solidarity which would militate against further secessions, and the government could see to it that banks in any state which did revolt would be deprived of their currency. Such was the setting of the Federal Government's entrance into the business of chartering and supervising banks within the several states, in competition with existing state machinery. We have already noted how a rather general impression prevailed to the effect that, being a creature of war finance, the new system would gradually die out as the war obligations on which its notes were based were retired. But even when the note issue privilege became an inconsequential advantage in banking, the relatively high

standards of the national system still enabled it to occupy a preferred place in banking circles.

It is not in keeping with the facts to leave the impression that the National Act was a mere copy of the New York system. From the standpoint of public protection, some important new elements were added. For instance, never before had the national government assumed the responsibility for the payment of the obligations of private corporations, as it undertook to do when it bound itself to redeem all national bank currency The right also to compel any national bank in the country to accept at their face the notes of every other was a great protection to the innocent noteholders who had been subjected to accepting heavy discounts on most of the state bank issues which came into their possession. Furthermore, the inauguration in every state in the Union of banking enterprises having a uniform legal basis and under common supervision eliminated much of the uncertainty attached to interstate financial transactions.

In proceeding to an analysis of the record of the Federal Government in the regulation and supervision of banking, we shall find that in some respects it constitutes a real achievement in American financial annals, while in others it has displayed the same weaknesses as have characterized the state systems.

The uniform government bond secured currency provided by the national system was just as inelastic as that issued under the free banking laws of the states. National banks were limited in their issue of notes to the amount of their paid in capital stock. Almost without exception, they proceeded to issue the full amount at the start. Consequently, when seasonal or emergency needs for more currency arose, there was no provision for procuring it. The national bank note is still as inelastic by nature as it ever was; for, although many national associations have outstanding only a fraction of their lawful maximum, United States bonds carrying the

circulation privilege have been so reduced in amount by successive redemptions that they are extremely difficult to procure. A banking system which employed commercial paper as a basis for note issue would have saved the country from the distressing collapses of our credit machinery in 1873, 1893, and 1907, but such a plan would not have furthered the object of the progenitors of the system, viz., the sale of government sceurities. Fortunately, since 1913, we can depend upon the Reserve Banks for additional supplies of both money and deposit currency, so the inelasticity of our national bank note has become a matter of historical interest only. From the standpoint of safety and dependability, the national currency was all that could be desired. Whereas, in the days of the state-regulated bank notes, the heavy losses from depreciation and the confusion attached to the utter lack of uniformity of the several issues constituted a serious business hazard, a national bank note was as good as the government and always remained at par with whatever money was the *de facto* standard of value, i.e., with the greenback till 1879, and with gold ever since.

As we observed when we were considering the organization of state banks, the Comptroller of the Currency, the title given to the Federal superintendent of banks, possesses large discretionary power in granting or withholding national bank charters. He is expected to make a confidential inquiry as to the need for the new enterprise and the fitness of the proposed sponsors to undertake its operation. Since the appalling list of failures growing out of the agricultural crisis of 1920, Comptrollers of the Currency have been much more strict with respect to the granting of charters. Much more careful investigations have been made into the character of the applicants and the genuineness of the need for the bank. As a result considerably more than half of the applications for charters are being rejected in contrast with less than twenty per cent in the period immediately following the

Armistice. The present $25,000 capital stock minimum is a big improvement over the $5000 and $10,000 requirements of some of the states, but still encourages the starting of too many weak enterprises. As is the case with the state systems, this minimum is permitted only in the smaller towns and villages, the requirement being increased with the population, until in cities of over fifty thousand population, there must be a capital of at least $200,000. The difficulty has been that, while the urban banks usually have a capital and surplus far in excess of the required minima, the rural associations as a class attempt to operate on the least the law allows.

We noted that out of the Money Trust Investigation in 1913 there came an effort to curb interlocking of bank directorates. It was embodied in the Clayton Anti-Trust Act (1914) in the shape of a provision forbidding any person to serve as director, officer, or employee of more than one national or member bank or trust company, if either of the two has a total of more than five millions in deposits, capital, surplus, and undivided profits. State and private bank officials were likewise forbidden to be directors of national banks if either institution has more than the five million dollars combined total. Banks in cities of more than two hundred thousand inhabitants cannot have an interlocking of officials unless one institution owns the other outright. These rigid prohibitions were somewhat softened by the Kern Amendment (1916) which authorizes the Federal Reserve Board to make exceptions when it is clear that the two institutions are not in substantial competition. So far as can be observed, the important banking interests continue to work as closely together as they ever did, but so much has been done in the past fifteen years to provide an adequate supply of credit—long, short, and intermediate—at reasonable rates, that the interests who were most active in their attacks upon "Wall Street domination" have turned their guns from the credit situation to other cases of alleged plutocracy.

It is not necessary to recite here in detail the radical changes which have occurred in the past fifteen years in the direction of liberalizing the exacting requirements originally imposed by Congress upon our national banks. We have already seen how reserve requirements have been radically lowered, how powers granted to banks have been so increased that the present-day national association would hardly be recognized by its prototype of 1863. There should always be the greatest measure of freedom accorded by the state consistent with the public welfare. To the extent that the Federal Reserve System and other recent banking innovations have permitted liberalization to be accomplished without a loss of strength or efficiency in performance, there is no ground for criticism. Where, however, Congress was actuated by the mere desire to make it easy for national banks to compete with the state institutions, the national system is, to that extent, receding from the position of leadership it has held since its inception. Some of the changes have been made so recently (1927) that there has not been time to observe their effect. Those which were embodied in the Federal Reserve Act and subsequent amendments have been productive of both good and evil. It can be put down to their credit that they met the stupendous demands of the World War and its accompanying régime of great activity and high prices, but the extreme credit inflation which resulted in the crisis of 1920 and the disastrous consequences to business, particularly agriculture, were also made possible by this same liberalization of our banking laws.

The supervision of our national banks is vested in the office of the Comptroller of the Currency. In spite of his irregular term of five years, his office is not removed from politics. He is legally independent of the Secretary of the Treasury but his subordinates are not. Changes in the position of Comptroller have been painfully frequent. A tradition has grown up to the effect that he should be appointed from

territory tributary to Chicago; so with few exceptions, the incumbents have been from the Middle West, and have therefore had the same background. No doubt, the idea that this office was Chicago's particular plum has had a good deal to do with the case, but popular prejudice against Wall Street has undoubtedly prompted the selection of western men. Since the nomination is made to the President by his Secretary of the Treasury, the nominee is under a certain obligation to do the latter's bidding, again introducing the danger that fiscal operations of the Treasury may unduly influence our national banking policies. The Comptroller is ex-officio a member of the Federal Reserve Board; and again, his fellow member, the Secretary of the Treasury, will look to him for support if Treasury interests seem to conflict with general Federal Reserve policy. Since national banks form the backbone of the Reserve System, the Board's activities are for the most part concerned with the national system's affairs; and yet the Comptroller, as its head, is in a position to formulate and put into effect policies opposed by his fellow Board members. There is much to be said for abolishing the position of Comptroller and putting the national banks directly under the Board's supervision. If this were done, however, it would be desirable in the interest of efficient administration for the Board to designate one of its members as the active supervisor of the national system, under the entire Board's general direction.

The examination and immediate supervision of national banks has been placed upon a relatively efficient basis, by dividing the country into twelve districts, coterminous with the Federal Reserve districts, with a chief examiner and his staff in charge of each. The staff assembles in the office of the chief twice a year. Reports are presented covering the conditions present in every unsound bank in the district, credit information is exchanged, and methods of strengthening the system of inspection and supervision are discussed.

Each national examiner is expected to examine, on the average, seventy moderate-sized banks. In the case of large institutions assistance is provided. The chief examiner makes up a report for each bank, obtains the examiner's signature, and undertakes to reconcile inter-bank transactions by a comparison of statements. Copies are furnished to the Comptroller, the local Federal Reserve Bank, and the officers of the examined bank.

National examiners have been placed upon a merit basis and given fairly adequate salaries, as was pointed out in connection with our discussion of the salary situation in the various state departments. The whole spirit of the organization in recent years has been one of constructive guidance, rather than a mere verification of records. Barring the modicum of political interference which still crops out occasionally, national bank supervision is on an efficient, business-like basis. It is probably affording the public about as great a degree of protection as can be secured by a moderate expenditure of funds and a reasonable degree of intrusion into the affairs of the banks. But it should be repeated that external inspection and supervision, from their very nature, can never insure flawless integrity and superior ability in the conduct of banks. These qualities will be secured when law and the state of the public mind insist upon limiting the banking profession to men who possess them.

5. The Present Status of Private Banks

For generations individuals and partnerships, styling themselves private banks, have transacted a banking business as a common-law right. These establishments have been of two radically different types. The large urban private banking house accepts deposits, but as a rule does not discount business paper. It is concerned primarily with the financial aspects of the organization and with management of large

businesses. It works out financial plans for governments and private corporations, and directs the marketing of their obligations. The small private banker, on the other hand, operates in a city neighborhood or in a country town, conducting much the same type of business as his state and national competitors.

Since the business of the large private banking house is of entirely different nature from that of the ordinary bank, the whole scheme of regulation set up for the latter would fail of its purpose, if an attempt were made to apply it. What abuses have crept in have involved matters of too close coöperation between the various houses, and a consequent danger of limiting competition unreasonably, rather than any question of solvency.

The small unincorporated bank has had none too creditable a record. State after state has either forbidden their existence or compelled them to submit to the supervision of the state banking department. Texas, Michigan, and Iowa, alone of the states, allow them to operate unsupervised.

6. Regulation by the Clearing House

In the preceding chapter, we found that the associated banks in a local clearing house association gradually build up a whole category of functions quite removed from the simple process of clearing checks. The decision on the part of certain members of the Chicago Clearing House Association in 1905 to supply funds to three badly embarrassed banks in order to check a run that threatened to spread to the other banks of the city, was responsible for one of these acquired functions—the clearing house examination. Bankers in Chicago came to realize that every now and then ugly rumors were likely to gain circulation regarding one or more local institutions. If these institutions deserved to be helped, it was to the interest of the other banks to come to their aid;

but no accurate judgment could be formed unless the associated bankers had the facts. Better still, if the associated banks had some system for finding out what was going on in all of the various members' establishments, they could nip in the bud practices and conditions which, if unchecked, would lead to serious difficulties for the member in question and perhaps for all of the banks of the city. Out of the affair, therefore, evolved a system of clearing house examination which has spread to a number of important cities.

The gist of the plan is that the clearing house keep a day-to-day record of conditions in each bank, supplementing it with a careful periodical examination by the examining staff of the clearing house. The examiners and the officers to whom they report are in a position to acquire a more intimate knowledge of the loans and investments of a local bank, even in a great city, than are outside examiners from a state or district office. It should be said, however, that the state and national systems realize the desirability of specialization, and in jurisdictions containing centers of population assign certain men to them. The scrutiny given to reported situations by the best banking brains in the city, followed by timely advice and warning to weak or erring institutions, has more than justified the expense and annoyance attached to submitting to another series of reports and examinations. Where banks in cities having clearing house examinations have failed, it has not been due to a lack of previous knowledge of their affairs on the part of the clearing house. For some reason inherent in the local situation, the members were unwilling or unable to ward off the impending disaster.

7. The Contribution of the Federal Reserve System to Banking Safety

The Federal Reserve Act gave to the Board and the Banks the right to examine members of the System, but unless they

believe some highly unsatisfactory condition exists, they are accustomed to accept the findings of the regular examiners. The System has been criticized for its inability to prevent bank failures in 1920 and the years following. Insofar as it might have prevented the credit excesses of 1919 to 1920, by more vigorous restraining action in 1919, it may be considered partially responsible; but the small bankers of the Middle West and South had so over-extended themselves during the boom period that no power could have prevented their failure in large numbers. Federal Reserve Bank officials deserve great credit for sending their staff members out to embarrassed banks and taking every reasonable step to keep them from failing.

By virtue of having introduced better banking practices, the Reserve System has materially increased banking safety, even among non-member banks. The practice of obtaining statements from borrowers, while of long standing, has become much more widespread under Reserve Bank influence. The assets of members have become more liquid by virtue of the discount facilities of the System, its willingness to buy an almost unlimited amount of acceptances, and its heavy dealings in government obligations. Normally, its influence is in the direction of conservatism and business-like procedure. The speed and system with which collection items are handled, the care with which borrower's paper is scrutinized, the insistence upon a meticulous compliance with all of the System's requirements are all influences for greater stability and safety throughout the whole banking structure.

8. The Contribution of Branch Banking to Banking Safety

Branch banking has been hailed in some quarters as the solution of our perplexing problem of bank safety. The matter is by no means so simple. A branch system, with its highly paid supervising staff, its large and varied resources,

and its carefully developed policies, does afford to its smallest unit that sense of security which supposedly able management and large resources can give. On the other hand, as the history of Canadian and European banking shows, the officials at the head office, while insisting upon the most scrupulous performance from the branch managers, have sometimes squandered the resources of the whole system and brought about widespread ruin.

In spite of the greater diversification possible in the loans and investments of a branch bank, there occasionally comes a sharp turn in the economic situation or some calamity like flood, storm, or earthquake, which imperils so much of the bank's assets as to wreck the whole chain. If we had a system of nation-wide branch banking, physical calamity would never be widespread enough to affect more than a minor part of the bank's territory. What it would have to fear would be a violent and far-reaching economic crisis like that of 1920. Even here, Canadian experience shows that the nation-wide systems exhibited a great deal more restraint during the boom period and hence suffered much less than did our independent banks.

Other things being equal, the great diversity of loans and investments made possible by a branch system makes for greater safety. The greater insistence upon definite security in the form of collateral or a satisfactory business condition, as revealed in a financial statement, the ability to engage the best talent in the banking profession, are all advantages which the large banking enterprises offer for the protection of their creditors. The embezzlement of funds by an officer or the writing off of a good-sized bad debt creates scarcely a ripple in the affairs of a large organization, whereas a small independent unit would stand the strain with difficulty.

If the heads of our branch banks then are sane, able, and conservative, from the very nature of the case the development of branch systems should make a striking contribution

to banking safety; but if a large branch system should fall into the hands of unprincipled or incautious leadership, the possibilities for widespread ruin are much greater than in a system of independent units.

The development of branch banks has changed the whole complexion of public regulation and supervision. Our state and federal supervisory systems were devised primarily for the small independent unit. They have had to be modified considerably to perform adequately their duties in connection with the great independent banks of the cities. Now, they are confronted with an even more complicated problem, the bank with several hundred scattered places for doing business. The simultaneous examination of over three hundred offices is a task that challenges the resources of any state or district examining force, and yet if it is not done at least occasionally in this way, the juggling of inter-branch items and the shifting of undesirable paper could easily conceal extensive fraud. If state and national supervising officials are to give constructive leadership to the banks within their jurisdictions, they will have to acquire the point of view of the two billion dollar institution as well as that of the one with the minimum capitalization. A saving factor in the situation is the thoroughness with which the head office itself examines the several branches. These frequent audits, coupled with the highly detailed reports and duplication of branch records and portfolios in the head office, are calculated to reveal promptly and fully any derelictions on the part of a branch. So far as actual mathemathical effect goes, a rather bad situation in one branch could occur without an appreciable effect upon the others, but in this day of rapid communication it would be easy for distrust of the whole bank organization to develop out of a run upon a single branch.

The Canadians for a long time undertook no public supervision of banks, but developments in recent years, particu-

larly a bad branch bank failure, have brought about the introduction of government inspection. Realizing the herculean task involved in attempting to examine banks with branches numbering in the several thousands, the inspector confines his activities to the ten head offices. It is believed that he can thus acquire a familiarity with the inner workings of the whole organization and can help the officials to avoid serious pitfalls, or curb any disposition on their part to play "fast and loose" with the bank's funds. He has at his disposal both the details of the internal examinations made by the banks' own staffs and the independent audits made for the stockholders by firms of chartered accountants approved by the Minister of Finance. Nine-tenths of his time and effort are given to a consideration of the larger loans and investments of the banks. The Canadian point of view in the matter of examining and supervising large branch institutions seems wise. If we are unable to make a comprehensive examination of both branches and head office, we should by all means center our efforts upon the head office.

9. Measures Designed for the Protection of Specific Groups of Creditors

Thus far in our study of the problem of public regulation we have concerned ourselves with the safeguarding of the business as a whole. We now consider briefly the groups for whom special protective devices are evoked, viz., the noteholders and the depositors. So solicitous have governments been regarding the former, that it is almost universally the practice to prescribe a group of special safeguards. As we saw, state bank notes were taxed clear out of existence, and national banks required to deposit the highest type of collateral, government bonds. In addition, the notes were made a prior lien upon the bank's other assets, and the Gov-

ernment gave its pledge to redeem any that the proceeds of the bonds and other assets failed to provide for. The reason for this solicitude for the noteholder lies in the existence of a quasi-compulsion to accept every form of domestic money which happened to be offered. From its very nature, money must pass freely from hand to hand, mediating exchanges; and if questions must constantly be raised as to its goodness, its whole purpose is largely defeated. For a person in Maine to have to ascertain the goodness of an Oregon bank note, handed him in payment, would take us back to the old days of wild cat money before the Civil War, when daily lists had to be posted, showing the current exchange value of each of the mass of state bank notes in use. Even then, the person receiving a bank note incurred the danger of its depreciation in value. Since, therefore, the recipient of a bank's notes becomes its creditor, with little or no choice in the matter, it is quite generally taken for granted that he should be accorded special protection.

The case for special safeguards for depositors[1] is not so clear. A depositor usually lives in the community where his bank is located. In most communities, competing institutions are near at hand, so that becoming a depositor is a matter of choice. On the other hand, it is asking a good deal of the average depositor to expect him to ascertain the real condition of his bank. We observed that even highly trained professional bank examiners are sometimes utterly misled by their inspection of the bank's records and portfolio.

Early in the nineteenth century, New York State provided a common safety fund to take care of the claims of noteholders and depositors of defunct banks, but it soon became apparent that the fund was inadequate to provide for both. Hence the depositor, having the poorer claim on such protection, was left to shift for himself. Since the great mass of the people did not have deposits in banks, the case

[1] See T. P. Robb, *Guaranty of Bank Deposits.*

for the noteholder was much stronger than it is today. By the early nineties, however, deposit accounts had become common; and, when a number of Middle Western banks failed in 1893, a demand arose for the guaranty of bank deposits. The idea was so new to that generation that it did not receive general approval and was permitted to lie dormant until the widespread failure of banks, following the panic of 1907, again forced it to the front. Since then, deposit guaranty systems have been put into operation in several western and southern states. Both the national and state systems have always provided for the maintenance of reserves equal to a certain percentage of the deposits, but this device does not constitute a safety fund out of which to pay depositors' claims on the bank. It exists as a warning signal against overexpansion. Even when a bank fails, its reserve, if it has any left, is applied on the claims of all the creditors.

Guaranty or safety funds are a sort of deposit insurance. They assume that not more than a certain small percentage of the constituent members in the scheme will succumb in any one year, and that the participating banks, no matter how healthy they may be now, would be glad to pay a small annual premium in order to prevent a crop of failures from starting and to avoid the contingency of facing bankruptcy unaided, themselves. A serious difficulty met in applying insurance schemes to bank deposits is that the calculation of the probable number of failures per year does not lend itself to ordinary actuarial predictions. Several years may pass in which no demands are made upon the fund, on behalf of defunct bank depositors, and then a serious crisis may precipitate a succession of failures which will throw the whole project hopelessly into bankruptcy long before the epidemic of failures has come to an end.

While the Supreme Court of the United States has upheld the right of a state to enact compulsory deposit insurance laws, banks have ceased to relish the idea of trying to be

their "brother's keeper." Most of the systems of which we have just spoken are either to be definitely abandoned in the immediate future or are in such a state of insolvency that they may as well be closed. When it comes to life insurance, the average insured person will not take any the less care of his health because of the fact that his dependents have protection. Many bankers, on the other hand, seem to relax their standards very materially when they become participants in a bank deposit guaranty plan. The very existence of such systems seems to place all bankers upon a level. Instead of stimulating the banking profession to the very best methods and standards, it seems to foster more of a happy-go-lucky frame of mind.

There is no doubt that the depositor's funds ought to be made safer than they have been in the past. With a great array of good, bad, and indifferent institutions from which to choose, the average person cannot be expected to make a fool-proof choice every time he chooses a place to deposit his money. If deposits could be successfully insured, a great contribution would have been made to the public welfare.

The chief difficulty of the state systems has been that most of the bank assets of a given commonwealth were loaned for agricultural uses, and that, when a crop failure or general economic depression came, wholesale bank failures resulted. A nation-wide insurance plan would achieve the result of much greater diversification of risk, but in a severe crisis there would be heavy losses to meet, and in spite of the Supreme Court's approval from a constitutional standpoint, it scarcely seems fair to compel the honest and ably managed banks to shoulder the losses of the enterprise less capably or dishonestly conducted. It might be desirable to follow the policy of the life insurance companies and select only good risks, on the basis of a careful examination. By attracting all of the good banks to the insurance system, the plan would place the unfit at such a competitive disadvantage that they

might be weeded out. The patrons of the selected banks would be glad to bear the ultimate burden of such a plan, for it would cover only unforeseen misfortunes and would be free from the risks arising from dishonest or incompetent banking. The next problem would be to see that the good bank remained good. This cannot be achieved by inflicting still another set of periodic examinations upon banks already much-examined. A permanently sound and workable nation-wide system of deposit insurance cannot be hoped for until high standards are enforced within the banking profession itself, until undercapitalized weaklings are weeded out of American banking and until public supervision is on a uniformly high plane. One may well ask whether, if banking achieves such a degree of excellence, a system of deposit guaranty would not be superfluous. Unpreventable misfortunes will always befall bankers here and there; and, so long as we adhere pretty generally to our plan of many independent banks, it would be highly desirable to make possible a satisfactory plan for paying their depositors. If ever banking is done by a few large branch systems, their large and varied resources and skilled management should constitute sufficient protection to depositors.

10. The Bank Failure Situation in the United States

Thus far, in this chapter, we have been considering the means we have adopted for keeping banking sound and healthy. It will now be of interest to see what the results of this effort have been. As would naturally be expected, bank failures are negligible in a period of feverish prosperity like 1917–20. During moderately prosperous times, with the exception of those which are a "hangover" from a preceding period, there are occasional failures, largely due to mismanagement, defalcation, or criminality of some other sort. Following a crisis like 1907 or 1920, many institutions

are found to have so large an amount of frozen or uncollectible loans that they are compelled to close their doors for lack of funds with which to meet depositors' and other demands. The aftermath of the crisis of 1920 has been particularly bad. More banks have failed since 1920 than in the whole period from 1863 to 1920. Whereas in the earlier period, much the greater part of the assets was salvaged and paid to depositors, it is conservatively estimated that not more than one-half of the amounts involved in the failures since 1920 will ever be paid.

The national system has made a somewhat better showing than the states, but considering its higher minimum requirement for starting a bank, it has little of which to boast. With few exceptions, both national and state failures since the war have been concentrated in the agricultural areas of the West and South. As might be expected, the mortality was greatest among the small country banks with which these regions were all too liberally supplied. Some states have lost from a third to a half of the banks in existence in 1920. Banks which for fifty years had had an enviable reputation for stability, found themselves hopelessly burdened with uncollectible paper. In some of the most prosperous and substantial middle western states, land soared during the 1917–20 boom, to very high figures. Bought one day at unheard-of prices, it was transferred the next at still higher figures. Marginal trading in land became as common as similar operations in stocks. Bankers loaned $200 per acre on land, valued at the moment at $400, whose normal pre-war price had never exceeded $200. The abnormally high income afforded by war prices of farm products, together with the speculative mania, stimulated the desire to acquire more land. When the collapse came in the late summer of 1920, prices of products and land suddenly dropped below the pre-war level. Because of the emergency aid afforded by the Federal Reserve Banks, the War Finance Corporation and

the Land Banks, the day of reckoning for the individual banker was postponed. But as time went on, and his loans to farmers could either not be met at all, or only on a depreciated basis, embarrassed banks, one by one, closed their doors. Others are remaining open only by grace of agreements on the part of depositors and other creditors not to disturb their funds for a period of, say, five years. Others have agreed to treat only sixty-five per cent of a deposit account as active and have allowed the bank to set aside some of its badly frozen assets as security for the payment of the other thirty-five.

The comfortable attitude of mind to assume with reference to the failure problem is that the United States is not likely to be involved in a World War again, with its accompanying violence of price movements and subsequent disaster to bank borrowers. Whether we have another great war or not, marked cyclical fluctuations still occur, in spite of well-directed efforts at reducing them. Furthermore, widespread failures of crops will occur periodically as a result of conditions over which man has no control. Hence, there are bound to be epidemics of failure among the small and indifferently managed rural banks.

Investigations of the conditions back of bank failure epidemics show that they occur in overbanked states, and that the tendency of the banking departments of these states has been to grant charters with too free a hand when times are good. Since one needs only a small amount of capital to start a bank, a group of farmers and townspeople can much more easily organize an enterprise of their own than be dependent upon some existing institution. In most states they are entitled to a charter so long as they comply with simple formalities.

Writing insurance, selling land, operating a farmers' elevator or a general merchandising business, as side issues, seem to be essential to a small banker making a good living,

for a study of 206 small banks in a middle western state shows that the net profit from the operations carried on in the bank itself averaged but $677 in a period of relatively good times. Now that the state and national agricultural credit institutions have taken the cream of the farm loan business, and the par collection system of the Federal Reserve has deprived country bankers of a large part of the former imposing volume of exchange charges, it is all the more difficult for a country banker to make his enterprise pay. When failure does occur, the double liability and other protective features are often of little avail. Out of the banks which failed between 1865 and 1925, receivers had been able to collect but 314 millions of the total assets of 615 millions, and out of this amount but 188 millions had gone to the creditors. With a capital of 119 millions involved, but 31 millions had been collected from stockholders under the double liability provision, although receivers had called upon them for 70 millions. The stockholders are deserving of sympathy, however, for they recovered but 4 millions out of their investment of more than 119 millions in the capital stock.

Not only are banks too numerous, but men with too little experience and training undertake to operate them. Many of our recent disasters were among banks which sprang up during the period immediately preceding. Many of them were in the hands of immature and inexperienced officers. Instead of conserving the unnaturally large earnings of the war period, they paid them out as dividends. This situation may eventually be remedied, for already a movement has started for the licensing of bank officers. Such a measure can be of great value to banking safety and efficiency, or it can be made a ridiculous farce, according to the spirit in which it is carried out. There is also hope for better bank management in the rapid spread of education. An enlightened constituency will not deal with incompetent bankers.

Whether he wills it or not, the banker has become the economic adviser of the farmers in his community. In the period of high prices, immediately preceding the crisis of 1920, bankers should have encouraged farmers to pay their debts, but instead they encouraged them to buy more land and equipment and extend their operations still farther. It is dangerous to generalize in this fashion, for there were undoubtedly notable exceptions among the country bankers; but most of them were eager to participate in the abnormal profits which prevailed in all lines of activity. Not only was too much staked upon the fortunes of a single commodity like cotton or wheat, but it has since been revealed that the individual borrowers were granted excessive loans. The fact that half or more of the banks in the failure-swept areas were able to survive shows that some executives have the ability and self-restraint to weather difficult situations. They made smaller profits during the boom, but today their erstwhile competitors have nothing to show for their swollen profits of 1917–20.

Country banking in the United States needs a much better type of institution than the rank and file of banks have proved themselves to be. The minimum capital requirement should be raised very materially and the administration of banks confined to those who have met the tests of a state or national licensing board. The state and national authorities should see to it that the directors take an active intelligent interest in the management. It is difficult for a bank in a one-crop area to secure proper diversification in lending risk; but much progress is being made in crop diversification in such regions. Herein, of course, lies one of the great advantages of intersectional branch banking.

With the elimination of excessive competition in banking, some of the practices which have tended to weaken banks will disappear, for example, paying five or six per cent to attract time deposits from older states; carrying customers'

checking accounts regardless of how unprofitable they may be to the bank; extending credit without reference to the extent of the borrower's other obligations. A recent investigation in Minnesota showed that one borrower in the rural county in question had been obtaining loans from five different banks, none of them knowing that he had borrowed from the others. Large numbers were receiving credit accommodation from at least two institutions. Unless machinery is maintained for the complete exchange of credit information, it will be easy for a borrower to obtain from several sources the full amount permitted by his financial condition and the limit imposed by the law.

As we have seen, the guaranty of bank deposits has not prevented wholesale failure. On the other hand, it has lulled the bankers and the public into a feeling of false security. When widespread failure has come, guaranty of deposits has proved wholly inadequate for its purpose. As Hartley Withers, a distinguished English writer on finance, puts it, "Good banking is produced not by good laws, but by good bankers."

11. Present Tendencies in Bank Regulation

Study of recent bank legislation leads one to take a more optimistic view regarding the future of American banking, especially when the work of legislative bodies is being supplemented by the process of banking evolution. The following seem to be the prevailing tendencies in current bank legislation: (1) increasing the minimum capital requirements; (2) increasing the salaries and lengthening the terms of office of superintendents of banking; (3) enlargement of the authority of the superintendent relative to the granting of applications for charters and the making of regulations for the improvement of management; (4) the placing of bank liquidation in the hands of the state banking department, instead

of a private receiver, chosen as a reward for political service; (5) the recognition of "department store" banking and branch banking as legitimate phases of present-day business development; (6) placing less emphasis upon the frequency of bank reports and examinations and more upon the quality of the supervision; and (7) recognizing that state guaranty of deposits has not fulfilled its purpose.

It cannot be repeated too often that the public should not put too much trust in laws and public supervision as the solution for bad banking. They play a necessary part, but after all a decidedly minor one. The hope lies in our getting away from the "Tom, Dick, and Harry" concept of the banking business, and accepting the view that banking is a profession which should be conducted by a limited number of units, with ample resources and a personnel of banking experts.

BIBLIOGRAPHICAL NOTE

T. P. Kane, *The Romance and Tragedy of Banking* (New York, 1925), recounts in a most interesting manner the experiences of the author who was for many years a member of the staff of the United States Comptroller of the Currency. This book presents the bank regulation problem in an unusual way.

One should read the opening pages at least of recent annual reports of the United States Comptroller of the Currency, for the early part of each report contains a survey of the existing situation and recommendations concerning it.

The texts by Moulton, Westerfield, Phillips and Magee, cited in the preceding chapter, present sound analyses of bank regulation problems.

For an historical treatment of American bank regulation the reader is referred to D. R. Dewey, *State Banking Before the Civil War* (Washington, 1910), and G. E. Barnett, *State Banks and Trust Companies Since the Passage of the National Bank Act* (Washington, 1911), both published as government documents in the National Monetary Commission series.

CHAPTER V

THE CENTRAL BANKING FUNCTION IN AMERICAN BANKING

1. The Nature of Central Banking

When the Bank of England, the oldest of the central banks of the world, was chartered, the concept of central or quasi-public banking was entirely undeveloped. An English king, William III, needed £1,200,000; and William Paterson, a Scotchman, was willing to supply it, provided he and his associates were granted a bank charter carrying with it the exclusive right to issue notes in the vicinity of London. From this beginning, the present conception of central banking gradually evolved by a more or less accidental process. From time to time other countries have copied the main ideas involved in the relation of the Bank of England to the State and to the financial system of Great Britain, and have adapted them to their own situations, changing the character of the relationship as new developments dictated.

It is impossible, therefore, to formulate a conception of central banking which would fit all countries and all times. A rather simple basic idea, however, underlies any type of central bank organization, viz., that the state has set apart a bank, or set of banks, which is charged with placing the public interest above earnings in the conduct of its affairs, and is to feel more or less responsible for the stability of the national credit structure and the adequacy of the medium of exchange.

The central bank organization almost invariably becomes the banker of the government, making advances to it in time of war and other emergency, distributing and redeeming its obligations for it, disbursing its funds and collecting its receipts. This service, however, is not essential to central banking.

The cardinal central banking function—the maintenance of the stability of the national credit structure—involves the accumulation by the central bank of a large part of the country's specie stock, either in its own actual possession or as a gold credit in another country. This involves, incidentally, the holding of the reserves of the other banks if there is to be an adequate mobilization of specie. The central bank must see to it that export gold movements and domestic credit inflations are not allowed to reach the point where the specie reserve ratio is seriously impaired. It is also charged with the task of meeting threatened monetary stringencies by having available at all times an adequate supply of bank notes; or, if the use of checks is prevalent, of providing the basis for the expansion of the volume of demand deposits. On the other hand, a properly functioning central bank must be equally able to contract the supply of money and deposit credit when it shows a tendency to become redundant. If its resources are to be ready at hand to meet any emergency which may arise, the central bank will have to forego many opportunities to make money for its owners or other recipients of its earnings; and, in a period of depression, its devotion to the public interest might even cause it to operate at a loss.

As one might expect, the existence of central banking machinery naturally leads to the acquisition of other important but not essential functions by these central institutions. Such, for example, are (1) the establishment of a central system for the clearing and collection of checks and the transfer of funds, (2) the assumption of a national leadership

in the adoption of new banking methods and policies, and (3) the setting up of elaborate statistical organizations which supply to the business world data of great value in the planning of programs of finance and production.

The European public has learned from long experience with central banking not to expect it to accomplish the impossible. Our own experience with a chain of central banks has covered but fifteen years, much of the period being highly abnormal. Critics of our central bank organization, the Federal Reserve System, are expressing disappointment over its failure to prevent the crisis of 1920 and the havoc which followed in the ensuing years of depression. More recently the System has been taken to task for its failure to put an end to the great "bull market" which has prevailed in the stock exchanges, and to wipe out the peaks and valleys of the business cycle. No central banking structure yet devised could accomplish these tasks. Furthermore, even if it could, it is extremely doubtful if public opinion would support the radical measures which would need to be employed.

2. The Background of Central Banking in the United States

The First and Second Banks of the United States (1791–1811, and 1816–1836) by no means embodied even the essential characteristics of a central bank. They were established for the primary purpose of making substantial profits for the United States government and other holders of their stock; but Alexander Hamilton, the founder of the First Bank, saw that an institution of this sort could render invaluable service to the Government and contribute to the general stability of banking.

In spite of the handicap of being footballs of politicians, the two United States banks did perform important services of a quasi-public character. They loaned money to the Treasury, collected its income, and disbursed its expendi-

tures. They issued a currency which was elastic and universally accepted. They checked inflation on the part of state and private bankers by sending their notes home to them at regular intervals for redemption.

One of the best evidences of the need of such services as the two banks performed is the condition which prevailed in the interval (1811–16) between the closing of the First and the inauguration of the Second Bank, and in the period immediately following the expiration of the Second Bank's charter in 1836. In both periods there was a rapid increase in the number of small irresponsible banks, with an accompanying expansion in the volume of paper money. The affairs of the Treasury suffered greatly from the lack of dependable facilities for money and banking, and business felt the absence of the stabilizing influence of the banks' operations.

The selfish opposition of the state bankers, together with the natural antipathy of the majority party toward the assumption of functions by the national government or any instrumentality of its creation, prevented the rechartering of the Second Bank and put an end to what might have been the basis for the erection of a strong central bank in the United States.

After successive secretaries of the Treasury had attempted to rely upon a miscellaneous collection of "pet" banks for the performance of fiscal services, even the bitterest enemies of the United States Bank came to appreciate the value of a single quasi-public institution, adequately equipped with branches, in the transaction of the Government's business. Finally, in 1846, the Government refused to place any further dependence upon the state banks or their currency, and established its own independent treasury for the custody of public funds. Furthermore, it required that all obligations to the United States be met exclusively with lawful money, which at that time meant only gold and silver coin. From

that time the funds of the Government were safe; but its new method of despatching its financial affairs was clumsy and inefficient, and caused serious annoyance to our financial structure by its sudden withdrawals from and additions to the supply of money in circulation and in banks.

The complete absence of any type of Federal banking from 1836 to 1863 helped to accentuate the lack of uniformity existing in the various states. The older commonwealths, particularly those in New England and the Middle Atlantic region, gradually ceased to yield to the temptation of unsound banking and by the outbreak of the Civil War had established sound and dependable systems. On the other hand, the newer and less developed sections of the country, with a few notable exceptions, were the victims of a succession of unsound banking experiments, until the outbreak of the war purged them of this evil by causing the unsound banks to fail. Even in those sections where local bank notes were good and banking was conducted on a relatively high plane, the public suffered from the influx of less desirable currency from other states. Crises degenerated into financial panics, for there was no central organization whose business it was to guard against such contingencies. Even the stronger commercial banks were unable to cope with emergencies in their own affairs because rigid inelastic systems of note issue had been almost universally adopted, and there existed no central reservoir from which reserves could be replenished or emergency supplies of currency obtained. The United States, for all practical purposes, adopted the gold monometallic standard in 1853; and yet, until 1914 there was no agency whose duty it was to protect the monetary structure from serious losses of specie through exportation in response to unfavorable foreign exchange rates.

The framers of the National Banking Act, as we have seen, sought to restore some of the services which the two United States Banks had performed. One of the dire needs

of the government at the time the Act was passed (1863) was additional fiscal machinery for facilitating the huge volume of transactions growing out of the war. The clumsy subtreasury system, aided by such state banks as had survived the secession crisis, was proving entirely inadequate for the gigantic task of furthering bond sales, collecting the various war revenues, and transferring funds to every part of the country. Government bonds, although they bore interest as high as six per cent, were selling much below par; so the creation of banks which had to buy a certain minimum in order to receive their charters, and a considerable amount in addition if they wished to issue currency in sufficient volume for the requirements of their customers, created a new and highly promising source of demand. In the latter case the project proved to be rather disappointing, for the volume of government loans was much in excess of what the national banks could absorb, even after they were accorded a complete monopoly of note issue in 1866. As additions to the war-time fiscal machinery, however, in spite of their being independently operated units, the new banks rendered valuable aid to the Treasury. Similarly, as stabilizers of the pocket currency of the country and leaders in the direction of uniform and safe banking practice, they performed something akin to central banking service.

There are obviously great shortcomings in the sort of public service which an unconnected group of many institutions, organized solely as money-making ventures, will render. No one has any reason for feeling a special responsibility for the welfare of the country's credit structure. As the banks in New York and other lesser money centers grew, there was a rapid increase in the concentration of outside bank funds in their hands; but when a crisis came, the New York banks were not only unable to come to the aid of their embarrassed country bank depositors with additional funds, but frequently were unable to return to them promptly the amounts they

had on deposit. The National Banking Act perpetuated both the rigid reserve requirements and the "perversely elastic" system of currency issue of the pre-war state systems; hence the banks in the money centers, with all their accumulation of resources, were not equipped to render aid to others or to take adequate care of their own local customers. Nowhere in either state or national systems was there a disinterested quasi-public institution which could serve as a dependable reservoir into which the country's banking reserves would pour and thereby form the foundation for a supply of money and credit adequate to meet any requirements which might arise. The National Banking Act provided no organization to protect the gold standard by guarding against the undue depletion of our stock of specie and by curbing undue expansion of the credit pyramid. No broad market was provided where a borrower could supplement the accommodations obtained at his bank, nor were facilities created whereby the highly provincial character of American banking could be broadened to world-wide scope. A marked lack of fluidity existed with respect to the supply of loanable funds in the various sections of the United States. As a result, an abnormal scarcity of credit and unreasonable rates prevailed in districts remote from money centers. Without a central institution of any sort, the various means of collecting out-of-town checks involved unwarranted expense and delay, while the transfer of sums of money from one part of the country to another involved the actual transportation of large sums of currency, as a result of unfavorable rates for domestic exchange in one region or another. The combination of an independent treasury system and favored national banks, through which the Government undertook to conduct its financial affairs, still caused serious disturbances to business by the spasmodic character of its withdrawal of funds, and rendered in a costly and inefficient manner services which

central banks performed much more expeditiously in other countries.

Some of the deficiencies of our banking situation were recognized from the start; but, in the thirty-year period following the Civil War, discussions concerning greenbacks and the remonetization of silver overshadowed questions of banking policy. Meanwhile, at every important financial crisis, a money panic resulted from the rigid provisions and lack of a dependable source of aid under which our state and national banks were laboring. The distressing need for emergency currency in the panic of 1893 started in earnest an agitation which resulted, exactly twenty years later, in the adoption of the sweeping reforms embodied in the Federal Reserve Act. Progress was particularly slow until the collapse of the credit structure in the panic of 1907 aroused the country to the necessity of a thorough-going reconstruction of our financial system. In 1908, Congress passed the Aldrich-Vreeland Act, which provided for a temporary emergency currency supply until a permanent plan could be devised; and for a National Monetary Commission whose duty it should be to make a thorough study of the whole subject of banking reform and to draft suitable legislation. The Commission's studies, in the preparation of which they enlisted the services of experts from all of the leading countries, constitute a valuable contribution to our knowledge of the ramifications of banking and currency theory and practice, and were of undoubted assistance in framing legislation enacted several years later. Meanwhile, the Aldrich Plan—the Commission's official program of currency reform—failed of passage after the Republican Party's defeat in the congressional election of 1910.

3. The Federal Reserve System—an American Conception of Central Banking

As soon as the Democratic majority assumed control of the banking committees of the two houses of Congress, work was begun upon a new banking reform measure. The final result was the present Federal Reserve Act. This measure, while it contained some slight concessions to the Bryan wing of the Democratic Party, represented an able adaptation to American traditions of the best European central banking practice. It did not copy any of the plans which had been proposed during the twenty-year period of discussion of currency ills, but it did owe some of its most valuable features to the ideas set forth in previous proposals.

Fifteen turbulent years have demonstrated the essential soundness of the Reserve System's basic structure. Although it was received coldly by the bankers, who had been rather generally committed to the Aldrich Plan, it eventually won their hearty support. In spite of much criticism from the agricultural interests of the Middle West and South, the Reserve Banks in 1927 were granted by Congress perpetual charters (in place of their twenty-year franchises which would have expired in 1934), with only a handful of votes in the negative. The real stumbling-blocks the System has had to encounter were the World War and political interference. Under the stress and excitement of the war, Congress passed amendments to the Act with little discussion; and, as we shall see in a later chapter, added unduly to the inflationary possibilities of our banking structure. Another unfavorable concomitant of the war was the excessive subordination of Federal Reserve policy to the program of the Treasury Department, the results of which we shall examine presently in considerable detail.

That a governmental agency like the Federal Reserve Board, and semi-public institutions like the Reserve Banks,

should be entirely free from the bane of politics is quite too much to expect. To the extent that party or banking politics has dictated appointments and policies, the System has been weakened, and has displayed this weakness principally through a lack, at certain times and in certain places, of vigorous and independent action.

The salient characteristics of this American conception of central banking are as follows: (1) Instead of one central institution as in other countries, the United States has twelve —one for each of the twelve districts into which our continental area was divided by the committee which organized the System. (2) Instead of being owned by individual stockholders, as are other central banks, all of the stock of the twelve Reserve Banks is owned by their patrons, the national banks and those state banks which have chosen to join the System. (3) Instead of being managed entirely by representatives of the stockholders, as in England, or by public officials, as in some of the Continental European countries, the administration of the Federal Reserve System embodies a combination of the two plans. The central supervising body—the Federal Reserve Board—is composed entirely of presidential appointees, while the directorates of the several Reserve Banks are made up of six persons chosen by the owner banks and three representatives of the public, selected by the Federal Reserve Board. One of the latter, the Federal Reserve Agent, is chairman of the board of directors and is expected to share with the governor of the bank the responsibility for the wise and honest administration of its affairs. It was practically imperative that there be a central coördinating body like the Reserve Board if the very purposes of central banking were not to be defeated by the too extreme decentralization which would have characterized a series of banks with no common leadership or supervision. (4) Instead of their facilities being directly available to the public, as in foreign systems, our Reserve Banks have direct

dealings only with member banks and the Federal Government, although the System's check-clearing facilities are open to such non-members as care to make use of them. (5) The mobilization of the nation's banking reserves, the assumption of responsibility for the stability of the credit structure, the provision of emergency discount and loan facilities, and a system of note issue upon an elastic base are common to the Federal Reserve and the other outstanding central banks of the world, save that the Bank of England still clings to a note issue based upon government securities and gold. (6) Even to a greater degree than characterizes the privately owned central banks of foreign countries, the Reserve Banks are required to forego large earnings and to formulate their policies in the public interest. When, in spite of this disregard of profits, the Banks find themselves with large net earnings, as occurred in the period of war inflation, the six per cent cumulative dividend provided by law is the maximum that can be returned to the stockholding banks. (7) The Reserve System is a part merely of the commercial banking machinery of the country, and does not offer facilities to the investment or speculative side of member bank operations, except for dealing in the securities of the United States. It cannot, however, prevent accommodations obtained from it from serving as the basis for a member's loans for any purpose for which the law permits a bank to extend its credit. The central banks of Europe, on the other hand, also discount paper secured by stock exchange collateral and thus are able to exert a direct stabilizing influence upon both commercial and speculative operations.

4. The Strength and Weakness of the Regional Plan of Central Banking

We have seen from the foregoing discussion that our plan of central banking differs greatly from the practice of other

countries with respect to institutional set-up; but with respect to functions performed, the differences are relatively inconsequential. Since no other nation has attempted to provide central banking services through more than one institution, it is pertinent to inquire into the wisdom of our course in setting up a regional plan.

The fear of and dislike for any sort of centralized money power seem to be deeply rooted in American thought. If we had chosen the plan of a single central bank, its logical location would have been in the Wall Street district in New York. No other situation would offer such admirable facilities for intimate contact with both the domestic and international money markets. But such a solution of the problem would have aroused the ire of a large part of our population. Even if this single central bank had been located in a less convenient place, but one farther removed from Wall Street influences, the century-old prejudice against central banks would have made it a constant target of attack. From the standpoint of political expediency, therefore, it was wise to adopt the regional plan rather than to undertake to force the idea of a single central institution upon an unfriendly public. The regional plan, however, has not fulfilled the cherished hope of some of its sponsors that it would decentralize the existing money market control and lessen the relative influence and importance of New York in financial matters. After fifteen years of the regional plan, New York still occupies a position of as relatively great importance as before the Reserve Act was passed. In fact, the exigencies of war have added greatly to its prestige, particularly in international finance. The Reserve System has itself recognized the peculiar position of New York by centering its open market operations and its transactions with the central banks of foreign countries in the New York Bank's hands. The latter, with its large resources, able management, and strategic location has assumed a position of leadership in the System.

It must be added, however, that from an economic as well as a political standpoint it was wise to set up a group of central institutions. The presence of Federal Reserve Banks and their branches in every part of the country has made the rest of the nation less dependent upon New York for its seasonal and emergency credit requirements. Furthermore, the various regions have profited by the intimate first-hand knowledge and sympathetic understanding of their credit problems which their local Reserve Bank has exhibited. Branches of a single central bank, no matter how numerous they were, probably would not have had so deep an interest in their constituents or would not have been granted so free a hand in providing for them.

The United States occupies an area practically as large as the whole of Europe, and embraces quite as great a variety of economic activities. The credit problems of Massachusetts differ materially from those of Florida or Oklahoma. A central banking system serving so diverse and extensive an area would, in any case, be compelled to maintain a certain number of ably-staffed and well-equipped district offices. Consequently, a regional system cannot be said to have added an undue burden of costly superfluous machinery. Whether the framers of the Reserve Act in providing for "not less than eight, nor more than twelve banks," and the Organization Committee in setting up the maximum number at the very start, acted wisely is another matter which we shall consider later. Our concern here is with the question whether, all things considered, central banking service in the United States can be rendered more satisfactorily by a single institution or a group of them.

The outstanding weakness of a chain of central banks is that the very arrangement, in a measure, runs counter to some of the important objectives of central banking, viz., the formulation and execution of uniform and harmonious credit policies, and the provision of a common leadership in bank-

ing methods and standards. Even the addition of a central board with authority over the twelve banks gives a clumsier and less efficient mechanism than a central bank working through a chain of branches. After all, the twelve Reserve institutions are full-fledged banks with a rather liberal grant of discretionary power, and the Reserve Board is not a bank but a supervising committee. It must deal with twelve semi-independent boards of directors, twelve bank governors, twelve Federal Reserve agents, and a like number of members of the advisory council. If under an arrangement of this sort, the members of the Board could arrive at and put into effect a unified policy, it would be high tribute to their tact and forceful leadership. No doubt, after the banks and the public became reconciled to the rather positive leadership of an able Board, a tradition would become established in favor of greater concentration of authority in the Board's hands. Since the troubles associated with the war have passed, the tendency seems to be in the direction of greater unity of action on the part of the constituent parts of the System. A case in point is the placing of the open market operations of all twelve Reserve Banks in the hands of a single committee working under Reserve Board direction. By its action in 1927, whereby it compelled the Federal Reserve Bank of Chicago in the interest of a uniform discount policy to establish a different discount rate from the one which its directors had named, the Board sought to establish its leadership more firmly.

Conditions since the World War are much more favorable to greater centralization of Federal Reserve operation. The nation became accustomed to acting as a unit. Inter-district borrowing, which might have encountered considerable friction before the war, was accepted as a matter of course. So were the other coöperative efforts of the twelve banks.

We need to strike the golden mean between a zealous concern for the needs and problems of a given reserve district

and a proper regard for the welfare of the nation as a whole. During the war, our decentralized plan of central banking was undoubtedly responsible for some of the excesses committed in the granting of credit. The country as a whole, and even the districts concerned, would have been much better off if a central authority had exercised a restraining influence. If we can preserve the advantages of our decentralized plan of central banking and at the same time correct its weaknesses, we shall have evolved a solution much better adapted to our economic situation and our political philosophy than would have resulted from an attempt to transplant the European idea of a single bank. Thanks to the war, and our inherent dislike for ineffective mechanisms of any sort, we have made progress toward coördination of Reserve Bank activity and the recognition of the Board's leadership in matters of nation-wide concern.

5. The Federal Reserve Districts

At the time the Federal Reserve bills were under discussion in Congress, many advocates of a regional plan were opposed to the creation of as many as twelve banks. A considerable minority was of the opinion that four such institutions—one, say, for each of four great areas tributary, respectively, to New York, New Orleans, Chicago, and San Francisco—would conserve the advantages of decentralization of central banking without imposing an undue burden of costly machinery and creating a difficult problem of coördination. But the advantage of more intimate contact with local needs possessed by a larger number of units, together with the appeal which always goes with having more prizes to distribute among the constituents of congressmen, won the day for the provision already quoted, viz., that the Organization Committee should establish not more than twelve nor fewer than eight banks.

It is now quite generally conceded that perhaps eight or nine banks would have served the several local interests quite as well as twelve, and would have lessened to that extent the clumsiness and expense entailed in the operation of the maximum number provided by the Reserve Act. The Organization Committee, however, did the expedient thing in handing out, once for all, the maximum number of "plums" which the Act provided, and thus relieved the System of a constant clamor for disturbance of established arrangements by the creation of the additional districts. As it was, there was great dissatisfaction, not only with some of the locations chosen, but with the assignment of territory to the respective regional banks. Some of the latter arrangements were subsequently materially modified, but no change has been made or is likely to be made with respect to the location of any of the twelve banks. All of them have erected costly buildings and the clientele assigned to them has become thoroughly habituated to the existing relationship. With the location of twenty-four branches in strategic places, and the constant increase in transportation efficiency, the most distant community is no more than a few hours removed from Federal Reserve facilities. It has proved, therefore, to be a matter of little consequence whether the provision of these facilities was under the jurisdiction of a particular Reserve Bank or of its nearest neighbor.

The Democratic Party, upon whose shoulders fell the task of determining the spirit of Federal Reserve legislation and of the subsequent inauguration of the System, was committed to a material decentralization of our monetary and banking resources. In the eyes of the rank and file of the party, New York held an unwarranted sway in financial matters. The party's leaders in Congress and the members of the Organization Committee made an honest effort to take this attitude into account, but could do little to alter a situation which is the result of the working of powerful economic

forces over a long period of time. Our national banking legislation had been blamed for fostering the financial supremacy of New York by encouraging the mobilization of bank reserves in the hands of New York bankers. The fact of the matter is that banks had found employment for their excess funds in New York long before the National Banking Act was conceived, and that the reserve city feature of the Act was merely recognition of long-established practice.

The committee could have placed the whole of the United States in the New York Federal Reserve district without going counter to the banking relationships of a single community; for every section of the country has long been accustomed to close financial affiliation with New York. It was a question of keeping the New York district down to the lowest possible size without too flagrant a violation of the habits of the surrounding banking constituency. The committee somewhat arbitrarily limited the district to the state of New York, but adjacent territory in New Jersey and Connecticut was afterwards added. Small as this district is geographically, its banking resources are so great that, in spite of the party's desire to equalize so far as possible the strength of the several reserve districts, the New York Reserve Bank greatly exceeds the others in power and prestige. Even if the committee had confined the district of the New York Bank to the lower end of Manhattan Island, the Bank would still have been outstanding in its resources and its influence among the twelve. As we noted earlier, the supremacy of New York in the field of finance was not disturbed by the official designation of eleven other reserve centers. The rest of the country still looks to New York as the most fruitful field in which to put idle funds to work; but the Reserve Banks have emancipated bankers from the necessity of counting upon the aid of New York bankers in time of trouble.

Since the services of the Reserve System are available in equal degree and on substantially equal terms to the most

insignificant hamlet and the largest metropolitan area, the fact that a committee did not succeed in doing the impossible feat of equalizing the strength of the districts and of placing every bank in the district of its first choice is of purely academic interest. If we had to do the job over again, we should probably have fewer districts, but we should know from our experience of fifteen years that their exact boundaries and the locations of the several banks are not matters of so great consequence as we thought them to be in 1914.

6. The Centralizing Mechanism in a Regional System of Central Banking

Even the most ardent opponent of a central bank recognizes that a dozen institutions uncoördinated and working at cross purposes could defeat all of the objects which central banking organization is designed to achieve. The question, then, resolved itself into one of securing the maximum of unity of policy consistent with a considerable degree of regional autonomy. The bankers of the country, if they could not have a central bank as the coördinating instrument, favored a board composed of bankers selected by them. They were to supply the capital and the patronage to the new banks, and it seemed logical to them that the complete administrative control should be in their hands. On the other hand, if their wishes had been heeded by Congress, we should have had a system whose operations were fraught with great public interest, completely lacking in public representation, and entirely under the domination of a group who, no matter how public spirited they might be as individuals, were collectively concerned solely with banking profits. To the authors of the Reserve Act, a compromise between the two points of view seemed to be the best way out. Accordingly a central board was created, consisting of a combination of representatives of the public and the banks. They had not

yet reckoned, however, with Mr. William J. Bryan, then Secretary of State, and leader of a strong faction in Congress. Among other conditions which Mr. Bryan exacted as the price of his support of the measure, was the elimination of all bank-selected members from the proposed central board. As a result, the Act as finally approved provides for two ex-officio members—the Secretary of the Treasury and the Comptroller of the Currency—and five (now six) others appointed by the President of the United States. If presidents could and would provide men of the highest caliber, free from the taint of politics, socially minded, yet having the full confidence of the banking interests, the existing plan would be above criticism. So long, however, as the danger exists of making appointments a reward for personal party service or a sop to a discontented section or group, it would be better to have on the Reserve Board a group of bank representatives who would be entirely free from political obligations. No party, however, is at all likely to make any such change in the composition of the Board. Such a step would arouse the antagonism of groups which have a natural antipathy toward bankers and moneyed interests generally. It would furnish too valuable campaign material to the opposition. Such changes as have been made have been a step in the opposite direction. The requirement in the original act that at least two members should have had experience in banking and finance was dropped in 1922; and, in an effort to meet the objection of farmers that the Board was not so constituted as to give the credit problems of agriculture adequate consideration, a sixth appointive member was added, with the understanding that the appointment should go to a representative of the farmers.

The present Board (1929) is composed of two attorneys, a newspaper man, a university professor, a merchant, and a farmer, in addition to the Secretary of the Treasury and the Comptroller of the Currency. The Board is expected to

obtain the views of its banker constituency through its joint meetings with the Federal Advisory Council, and from conferences with the executives of the several Reserve Banks. We shall consider its relations with the Council presently.

There has been agitation, from time to time, looking toward the removal of one or both of the ex-officio members from the Board. As for the Secretary of the Treasury, it seems highly desirable that either he or one of his assistant secretaries be a member of the Reserve Board. The operations of the Treasury are so closely related to those of the Reserve System that both the Government and the credit structure would suffer from the removal of the Treasury's representation. The Treasury may have dominated unduly the Board's activities during the World War, but there has been no occasion for such a situation since, and there is not likely to be unless it should arise in connection with future refunding operations. The regular duties of the Secretary of the Treasury are so exacting that he could not, if he would, take an extremely active part in the administration of the Reserve System. He can render his best service as a sort of liaison officer between the Treasury and the Reserve System.

As we have indicated in another connection, something is to be said for the abolition of the independent position of Comptroller of the Currency and placing it under the jurisdiction of the Federal Reserve Board. One member of the Board could be designated as superintendent of national banks under the Board's general direction. This would remove the present possibility of conflict of authority. The national banks of the country constitute the backbone of the Reserve System, and yet the Board's policies with reference to them can be almost set at naught by an unfriendly attitude on the part of one of its members, the Comptroller. There is, it is true, the same possibility in the case of the state member banks. They also serve another master, the superintendent of banks of their particular states. They,

however, do not constitute so predominant a part of the Reserve System, nor is it likely that any considerable number of the many state bank superintendents would be disposed to work at cross purposes with the Reserve Board at any given time.

The operation of the twelve regional banks has been placed in the hands of their respective boards of directors and the officers appointed by them; and yet at numerous points the Reserve Board is able to wield a vital influence in Reserve Bank operation. The Board appoints the Federal Reserve agent and two other members of the nine which constitute the bank's directorate. It passes upon the salaries of the bank staffs and can suspend any officer or director. It determines the eligibility of the paper received for rediscount and reviews the changes made in the rediscount rates. It has the right to examine a Reserve Bank whenever it sees fit and can require the writing off of assets which seem to be doubtful. If necessity arises, the Board can close a Reserve Bank temporarily, or place it in liquidation and start a new bank in its place. The volume of Reserve notes which the banks can issue is under the scrutiny of the Reserve Board, as is the establishment of branches by them and their interdistrict rediscounting operations. The Board, in spite of this, is not a bank but a supervising committee of public officials. It has no dealings with the public and few points of contact with the member banks, which after all are carrying on the real banking business of the System. The credit the banks are granting to customers and that which the Reserve Banks are, in their turn, granting to member banks are outside of the Board's province, so long as the general regulations of the System are being observed. The Board's business, then, is that of regulation, coördination, and supervision. From the nature of the case, each individual Reserve Bank will become more and more expert in dealing with the problems peculiar to its district. The Board can safely grant to the several

banks an increasing measure of internal freedom and can devote itself more largely to facing the external relationships of the System and to the formulation of policies affecting the credit structure as a whole.

Thus far the outstanding weaknesses of a government board as a centralizing mechanism in our banking structure have been as follows: (1) It has to do its work in an atmosphere of politics. Its presence in Washington makes it a bit too accessible to members of Congress and government officials who have an axe to grind. Although the appointed members hold office for ten years, there have been until recently many changes in the Board's personnel; and whenever there is a vacancy the temptation arises to use it in paying a political debt. (2) Due partly to the situation just described, and partly to the subordination of the Reserve System to the Treasury during the war, there has been in recent years a tendency on the part of the Reserve Banks to regard the Board not as the supreme body of the System, but as a more or less subordinate part of it.

In spite of these handicaps, the Board, during its fifteen years of existence, has established a reputation with the public for disinterested service to the national welfare. It has weathered successfully some most disagreeable war and post-war disturbances, and is now devoting itself to the development of permanent peace-time policies. The divorce of the Board from politics and the assumption by it of an unquestioned leadership in financial affairs depends a great deal upon the President of the United States. If future appointments are of a high order, based upon eminent fitness for the position and a genuine enthusiasm for central banking problems, the Board will occupy the place which the founders of the Reserve System had in mind for it.

When the composition of the Reserve Board was changed by the authors of the Federal Reserve Act, from a group composed partly of bank representatives to one made up exclu-

sively of presidential appointees, the constituent banks were left without a direct voice in the Board's deliberations. In order, therefore, that the views of the several districts with reference to Federal Reserve affairs be laid before the Board at regular intervals, a Federal Advisory Council was added as a part of the central mechanism of the System. This body is composed of twelve bankers, one chosen by the directors of each of the Reserve Banks. The appointment is for but one year, but some districts make a practice of returning the same representative, year after year. Others follow the plan of passing the honor around, which has the advantage of variety in point of view but does not give a council member an opportunity to become thoroughly versed in the duties of his office. Normally, meetings are held only four times a year as prescribed by law, so that unless the members of the Board see fit to summon the Council in extra session, its opinion is not available on questions currently before them. The membership of the Council thus far has been composed of bankers of outstanding ability, some of them members of the boards of directors of their Reserve Banks, but the majority without other contact than that of an executive position in a bank located in the district. The latter type is able to give to his fellow council members and to the Board the reactions of a "rank outsider" to the questions submitted to the Council, but has the disadvantage of a lack of any first-hand contact with Reserve System problems. The Council's chief usefulness, then, has been in providing the Board with outstanding bankers' opinions concerning matters which the Board has placed before them, and in interpreting to the Board the sentiment and temper of their respective districts. It would be too much to expect that a body so constituted, and holding brief and infrequent sessions, should launch into exhaustive consideration of Federal Reserve policy. The informal conferences of Reserve Bank governors and Federal Reserve agents which have become a permanent feature of

Federal Reserve administration are a much more promising source of aid to the Board and the Reserve Banks in the matter of helping to solve the System's problems.

7. The Position of the Reserve Banks in the Central Banking Organization

Our method of providing a central banking structure was unique in two important particulars. We set up a whole chain of institutions to do the work usually performed by a single bank, and we started them off with a full set of ready-made functions, whereas most of the central banks of Europe had attained their respective spheres of authority and responsibility only by a slow process of development. The Reserve Banks are also unique among central banks with respect to the fact that they do not belong to the Government or to private individuals; but like a mutual or coöperative organization are the property of their patrons—the member banks. And yet the representatives chosen by the member banks to serve as directors of the Reserve Banks are not entirely free to do the will of the owners they represent. The Reserve Bank is a quasi-public institution with the public interest paramount to that of the stock-holding banks. Not only by law and Reserve Board regulation, but by the very nature of its position in the financial system, its course of action must differ from that of an ordinary bank, however much its list of powers may on their face resemble those of a typical commercial institution. No matter how profitable the operations of a Reserve Bank may have been, the owning banks are forbidden to receive more than the six per cent cumulative dividend prescribed in the law. Any excess of net earnings must be divided between the surplus fund and the United States Treasury's debt retirement funds. The authors of the Reserve Act was determined that profit-making should be distinctly subordinated to public service in Reserve Bank operation.

We shall content ourselves here with a mere summary statement as to the place occupied by the Reserve Banks in the central banking mechanism, and in subsequent chapters discuss more fully the policies which have developed with respect to each of the more important phases of their operation. (1) The Reserve Bank is a member banker's bank only. It has no direct dealings with the public except as it may buy from or sell to individuals or firms in the course of its open market operations. (2) It centralizes the reserves of its members. (3) On the basis of this accumulation of funds, augmented by the capital contributions of member banks and the earned surplus, it creates a supply of bank notes and deposit credit in response to the demands of members for aid in meeting the financial requirements of their customers. (4) The twelve banks, operating through an interdistrict clearing system and a central gold settlement fund, afford to the country a swift and economical method of transferring funds and collecting out-of-town checks and drafts. (5) The Reserve Banks serve as the bankers and fiscal agents of the United States Government. (6) They have fostered improved credit standards, have improved banking practice and greatly broadened the field of operation and the instrumentalities of American finance.

In the very nature of the case, each of the twelve banks has developed a certain degree of specialization and individuality, in spite of the absolutely uniform character of the laws and regulations under which they all operate. This is particularly true of the New York Bank which has, without any deliberate effort or intention, come to occupy a position of leadership in the group. Its location in the nation's principal money market has caused the System to carry on its open market operations through the New York Bank. Likewise, the close contact existing between New York and foreign money centers makes it desirable for the Reserve Bank of that district to undertake the System's operations in the field

of international finance, such as the recent establishment of a series of gold credits in favor of the central banks of certain European countries as an aid to the restoration of stable monetary systems.

8. Membership in the Federal Reserve System

In our analysis of the structure and functions of the constituent parts of the central banking mechanism, we started at the top with the Federal Reserve Board and the Council which serve to correlate and coördinate the activities of the regional banks. We then examined briefly the part performed by these twelve institutions in supplying the facilities characteristic of a central banking organization. As we have seen, these banks depend for their existence upon the group of so-called member banks which employ their facilities and provide them with working capital through stock ownership and the deposit of required reserves.

The relatively large sums of initial capital required to organize the Reserve Banks might have been obtained from the public, as is done abroad, or advanced from the Federal Treasury; but the idea of coöperative customer ownership which had been employed in the short-lived Aldrich-Vreeland Act (1908–14) appealed to the framers of the Reserve Act as worthy of continuance. Accordingly, the ownership of the Reserve Banks' shares was confined to the banks which were to be the patrons of the System. Provision was made for a Treasury subscription, in case the response of the bankers proved to be insufficient to provide sufficient capital, but in the case of every Reserve Bank more than the required minimum subscription of $4,000,000 was forthcoming from the member institutions.

Some of our banking reformers visualized the Federal Reserve System as embracing in its membership all of the commercial banks of the country. The effectiveness of the

System, in their judgment, would be greatly enhanced by the formidable amount of capital which universal membership would place at its command. Control over the national credit situation would be much easier and the services of the regional banks would be available to every banker in the country. Much as the sponsors of the Reserve Act favored these advantages of "100 per cent" membership, they appreciated the fact that many so-called commercial banks are such only in name, inasmuch as they do little of the short-term, self-liquidating type of lending which is basic to commercial banking operations. All that such an institution would gain from membership would be a slight prestige. Moreover, our central banking structure, like those of other countries, has been reared upon a basis of short-term commercial or working capital financing, as opposed to the money requirements of speculation and long-term or fixed capital operations. Constituent banks, therefore, which did not devote a considerable part of their resources to the one type of financing in which the Reserve System engaged, contributed little or no strength. Many states permit the organization of banks with much smaller capital than the $25,000 minimum required in the national banking system. In barring this group from membership, the authors of the Reserve Act considered that it was carrying out the spirit of central banking, for probably none of these institutions was doing more than a modicum of commercial business. By implication also they were expressing their disapproval of attempts to operate banking enterprises with such meager amounts of capital. No other device was set up in the Act for the exclusion of banks which have no proper place in a strictly commercial banking organization. Consequently, some banks and trust companies joined which had little to gain from membership and contributed little to the System's strength. On the whole, however, bankers placed the matter on a basis of enlightened self-interest and have not joined the System unless the probable gain to them

clearly warranted such a step. Since national banks were compelled to become members or to surrender their charters, some of them are undoubtedly exceptions to this statement, for the desire to continue their operations under national jurisdiction probably overcame their doubts as to the benefits they might receive from membership.

Ideally speaking, it was unfortunate that any bank or group of banks should virtually be forced to accept a membership in an untried project like the Reserve System. Practically speaking, there was no alternative but to compel the national banks to enter. A constituency had to be provided if this great project of reform was to become a reality. From the nature of their calling, bankers are conservative and distrustful of new financial devices. If membership had been made voluntary, only a handful of institutions, at best, would have responded. Under our constitutional system, Congress has no authority to prescribe what state banks shall do; so the only way out of the dilemma was to make membership compulsory for national banking associations. In spite of many protests and threats of conversion into state institutions, ninety-eight per cent of the national banks accepted membership. Membership was thrown open to state banks with the exception of those with insufficient capital to meet the minimum requirements laid down for national associations in the National Banking Act. It had been generally expected that at least a representative number of strong state institutions would join, but after a passing flurry of interest on their part before the System was prepared to receive them, applications dwindled almost to the vanishing point. In spite of the liberality of subsequent Reserve Board regulations governing their admission, only thirty-seven of the more than twenty thousand state banks were members, early in 1917, when the entry of the United States into the war became a virtual certainty. Of the thirty-seven, only seven had as much as a million dollars in combined capital and surplus.

After all, this is not surprising. Until the Reserve Act was amended in June, 1917, the legal status of a state member bank was far from clear. Some of the states had been most dilatory about removing obstructions in the way of their banks joining the Reserve System. More important still was the fact that there were no compelling reasons to seek membership. The national banks were showing no great enthusiasm over their new relationship. They complained of red tape, loss of interest on their reserve deposits, and insufficient earnings to enable the Reserve Banks to pay dividends on the stock which members were compelled to buy. Conditions throughout most of the first two years of operation had been such that members had not been under the necessity of making liberal use of the rediscount facilities of the System. State banks, except in time of crisis, had always obtained ample assistance from the city correspondent on satisfactory terms. The correspondent had collected their out-of-town checks for them on favorable terms without insisting upon their remitting at par for checks which it sent home to them. To many banks, both members and onlookers, the prestige attached to having "Member of the Federal Reserve System" printed on one's stationery and plate glass windows seemed the principal advantage which membership had thus far conferred.

As the participation by the United States in the war became more and more imminent, and a natural increase in business activity had been so supplemented by trade with the belligerent countries as to begin to strain our credit facilities, the whole attitude of bankers changed. Non-members began to wonder if the Reserve System might not, in the near future, prove to be a desirable shelter from a war-induced financial storm. They saw in the mechanism of the System almost unlimited possibilities of expansion of credit accommodation to members, which meant opportunity to take full advantage of a rapidly increasing volume of business.

Moreover, as soon as the United States was definitely drawn into the war, government officials became anxious that the resources of the Reserve System be increased to the point where there need be no question as to its ability to bear a generous share of the burden of war finance. A patriotic appeal was made to eligible non-member banks urging them to become members. The membership provisions of the Reserve Act were so amended as to enable state banks to leave the System if they became dissatisfied. They were also granted the right to continue the exercise of any powers granted them by their respective states, provided there was no conflict with Federal law or regulation. From this time, state membership increased rapidly, the relatively great size of the banks and trust companies entering being even more impressive than the total number. From 53 banks on June 30, 1917, with resources of 756 millions, the membership of state institutions increased in one year to 513 banks with resources of more than six billions. The following fiscal year, the number more than doubled, though their total resources increased but two billions; thus, as conditions became more and more stringent, the smaller banks followed the lead of the large city institutions into the System. The increase in numbers of state bank accessions continued until 1922. Since then there has been a decline in both state and national membership. About a third of the so-called commercial banks of the United States now belong to the Reserve System, but their combined resources amount to more than two-thirds of the entire commercial banking resources of the country. This represents a loss of some 850 national and state members from the peak of 1922. On its face such a loss seems somewhat disconcerting, but when we examine the causes we find that the very serious epidemic of bank failures following the price debacle in 1920, and the wave of consolidation which has been sweeping the country, are in the main responsible. There has, however, been a withdrawal of nearly 200 state

banks from membership because of dissatisfaction, the same general line of reasons being advanced as we noted in connection with the failure of state banks to enter the System when it was first inaugurated. Until decided improvement in competitive conditions was brought about by the passage of the McFadden-Pepper Act, in 1927, the national banking system was gradually losing ground, irrespective of the question of Reserve System membership. This also automatically reduced the number of member banks. The defection has now been checked by the liberal terms of the new law and the tide has turned in favor of the national system.

Notwithstanding this heavy loss in total number of members, the System's membership relative to the total number of banks in the country has undergone little change, because of a decrease of three thousand in the latter figure since 1922, due to failures and consolidations. On any basis of comparison, be it numbers, resources, or deposits, the Reserve System is holding its own. Consolidations may continue to reduce the total number of banks in the System, but with the inducements offered by the McFadden Act, there is more than an even chance that they will operate under national charters and, to the extent that they have absorbed non-member state banks, will increase the System's resources. The epidemic of post-war failures has about passed, so that little change in membership need be expected from this cause. No new causes for dissatisfaction among state members have arisen and it may therefore be assumed that the discontented element has been pretty generally eliminated. It is quite safe to assume, therefore, that the financial strength of the System is in no serious danger of impairment.

In its efforts to relieve the great distress of the farmers following the crisis of 1920, Congress considered every solution which gave promise of any efficacy. In spite of the fact that the Federal Reserve System was in disrepute in the rural sections of the country, because of its alleged respon-

sibility for the crisis, the Agricultural Credits Act of 1923 contained a provision designed to make membership more alluring to country bankers. We have noted that state banks up to that time had not been permitted to join unless they had sufficient unimpaired capital to become national banks. The amendment of 1923 permits them to enter the System with only sixty per cent of the required minimum, provided that within the ensuing five years the deficiency is made up. This bargain offer has not appealed to non-member banks. But nine out of several thousand eligible to join have taken advantage of the concession.

Membership in the Federal Reserve System should not be crowded down the throats of non-members nor garnished with questionable allurements. Congress and the Federal Reserve authorities have gone to great lengths in providing for every phase of central banking service. The several Reserve Banks are serving their patrons with a high degree of skill and in a spirit of genuine helpfulness. A set of safeguards which have been tested by experience and found to be essential to sound regional banking has been established. Among them are the non-payment of interest on reserve deposits, the insistence upon remittance at par, the limitation of dividends to six per cent, and the requirement that all paper presented for rediscount shall conform to the accepted standards of commercial financing. If a bank is unable or unwilling to accept these terms of Reserve Bank membership, the public welfare is not so much at stake as to call for either coercion or coaxing on the part of the authorities. In normal times, the non-member's city correspondent will take adequate care of him, and even in a crisis will pass on to him the benefits of its Reserve Bank connection.

BIBLIOGRAPHICAL NOTE

One should read J. T. Holdsworth, *The First Bank of the United States* (Washington, 1910), published by the National Monetary Commission and R. C. H. Catterall, *The Second Bank of the United States* (Chicago, 1903), in order to understand thoroughly the extent to which these two institutions functioned as central banks. The National Monetary Commission volumes by Dewey and Barnett (see preceding chapter) and O. M. W. Sprague's contribution to the same series, entitled *A History of Crises Under the National Banking System,* afford a striking picture of conditions during the period when there was no sort of central bank regulation.

Professor Sprague's book, *Banking Reform in the United States* (Cambridge, 1913); *The Report of the Indianapolis Monetary Commision* (Indianapolis, 1900); and H. P. Willis, *The Federal Reserve System* (New York, 1923), are recommended for a study of the evolution of our present central banking organization, the Federal Reserve System.

Among the best books on the Federal Reserve System in all of its important aspects are the work by Willis, to which we have just referred; W. R. Burgess, *The Reserve Banks and the Money Market* (New York, 1927); H. L. Reed, *The Development of Federal Reserve Policy* (New York, 1922); and E. A. Goldenweiser, *The Federal Reserve System in Operation* (New York, 1925).

Two books have appeared from the pens of men who played a large part in moulding the policy of the Reserve System. One of them is by Senator Carter Glass, *An Adventure in Constructive Finance* (New York, 1927), the other by W. P. G. Harding, an outstanding governor of the Federal Reserve Board. Governor Harding's book, entitled *The Formative Period of the Federal Reserve System,* was published in Boston, 1925.

A symposium on the Federal Reserve System, published as the January, 1922, number of the *Annals of the American Academy of Political and Social Science,* contains contributions from a number of economists, bankers, and public officials.

The monthly issues of the Federal Reserve Bulletin, the official organ of the Reserve Board, as well as the Board's annual reports contain a wealth of current information upon Reserve System developments. The Bulletin also publishes valuable financial and business statistics and surveys of foreign banking conditions.

CHAPTER VI

THE RESERVE BANKS AND THE SUPPLY OF MONEY AND CREDIT

1. Characteristics of an Adequate Medium of Exchange

The relative proportions of money and deposit currency in the medium of exchange of a country depend upon the habits and traditions of the people. Changes are therefore gradual, except for the recurring seasonal and cyclical fluctuations to which supplies of money and credit are subject. We have already noted the fact that in the United States, until after the Civil War, checking accounts were not in general use; hence questions as to the adequacy of the medium of exchange centered around the stock of metallic and paper money available for pocket circulation.

As the safety and convenience of using checks became generally appreciated and satisfactory facilities for their clearance and collection developed, the status of our money supply assumed relatively less importance. Ability to create deposit credit as a result of a loan to a customer is now of much more importance to this generation of American borrowers, which makes almost nine-tenths of its total volume of payments with checks.

In a sense, then, the great stress which currency reformers, in the period just preceding the passage of the Federal Reserve Act in 1913, placed upon the need for an elastic paper money supply was a matter of looking backward rather

than forward. It was, and still is, highly desirable to have the quality of variability in the supply of money, but the expansibility and contractility of the volume of bank deposits is of much greater significance to American business today than is the ability to place more bank notes in circulation.

A country may be said to have an entirely adequate exchange mechanism when the following requirements are fully met: first, the total volume of money, as well as the amounts of the various kinds demanded, corresponds closely to the current monetary needs of the community, and is capable of increasing and decreasing automatically in harmony with changes in these needs; second, the volume of deposits subject to check also corresponds to the demand, will contract as the need for it passes, and is capable of immediate expansion to any amount called for by an increase in business activity. The existence of a central quasi-public banking organization like the Bank of England or the Federal Reserve System is not essential to an adequate medium of exchange. Canada has demonstrated that a small group of large branch banks, operating under soundly constructed banking legislation, can provide for a nation's currency needs adequately under every sort of condition.

In the United States, with its thousands of independent banks with no centralized responsibility for the adequacy of money and credit, there was no alternative other than the creation of a system of central institutions to carry this responsibility.

2. The Reserve System and the Supply of Money

Prior to the inauguration of the Federal Reserve Banks, our entire supply of money, with the exception of the notes of national banks, was provided directly by the federal government. Since the Treasury and the mints did not do a banking business, additional coins, gold and silver certifi-

cates, and greenbacks were not forthcoming in response to the demands created by an increasing volume of business. The only way the government can put money into circulation is by exchanging new pieces for worn ones and by making cash disbursements in payment of its running expenses and debt transactions. Gold is coined or gold certificates are printed as new metal is accepted at the mints. The volume of silver dollars and silver certificates became fixed when the silver purchase clause of the Sherman law was repealed in 1893. The new silver dollars we have had since that time have been coined from old bullion purchased before the repeal or from recent purchases made to replace silver furnished to England during the World War. The greenbacks, the government promissory notes of Civil War days, long ago had their maximum fixed at 346 millions. Small silver and minor coins are increased from time to time only as Congress is persuaded that the growth in retail trade, and other sources of demand for small change, calls for additional supplies. It can readily be seen from this survey of the possibilities for expansion that gold coins and certificates are the only kinds of money in the government's list which do not have their volume fixed by legislative enactment. Anyone can increase their volume merely by taking advantage of our free coinage system and bringing gold bullion to a mint. Since the supply of gold offered for coinage likewise corresponds in no way to the demands of the business world for more or for less currency, it is futile to look to any form of money issued by the government for an elastic element in our monetary supply.

The national banks provide us with a part of our currency, by circulating notes bearing the name of the issuing bank. This currency, although secured dollar for dollar by a deposit of United States bonds, cannot be issued in excess of an amount equal to a bank's capital stock. Furthermore, only a limited portion of the bonds of the United States enjoy the circulation privilege, a fact which serves as an additional

obstacle to expanding the supply of notes. The whole arrangement has caused national banks to base their decision to issue notes, not upon current demand for additional currency, but upon the relative profitableness of owning the necessary block of government bonds at the market price then prevailing. If it seems a good time to buy bonds, they are procured from a dealer, sent to Washington, and the notes are received and paid out over the counter and remain in circulation so long as they hold together, except that, before 1914, when they got into the hands of large city banks, they were sent to Washington to be redeemed out of the issuing bank's lawful money deposit, for, in pre-Federal Reserve days, city banks had to keep heavy reserves in their own vaults and could not use bank notes for this purpose. A national bank, therefore, normally had its full issue of notes outstanding regardless of seasonal and cyclical changes in currency demands. Consequently, when an emergency addition of any considerable size was needed, the national banking system, like the Government, was unable to supply it.

It is true that the authors of our currency reform legislation could have devised plans like the one in effect in Canada whereby the Treasury would have been entrusted with the task of providing emergency currency, without setting up special institutions largely for this purpose. But, as we have seen, the Treasury is not a desirable instrumentality, inasmuch as it does not have the necessary contact with the public. The receiving and disbursing of public money, instead of harmonizing or synchronizing with the needs of business for an expanding or contracting circulating medium, have often proved to be a bull in our financial china shop, by going counter to the needs of an existing monetary situation.

We might have copied the Canadian legislation still further, giving to our national banks the privilege of issuing notes upon their assets with an upper limit generous enough to meet ordinary needs. This would have provided a theo-

retically sound and scientific substitute for the inversely elastic national bank note, granted that a substantial part of the assets consisted of short term business paper (including the seasonal borrowings of the farmer). The trend, however, the world over, is away from permitting any but the central banking organization to issue bank notes. All forms of money, from the very nature of money itself, should be completely above suspicion. Money is designed to pass freely from hand to hand without any necessity arising for questioning the ability and the willingness of the issuer to redeem it. A system composed of a numerous and heterogeneous lot of banking units should not be entrusted with the task of providing satisfactory security for note issue. In order that the currency may be safe, it has to be loaded down with so many restrictions and safeguards that it is deprived of its power to expand and contract with the changing demand for money. Even in countries where a banking system composed of a few strong banks has demonstrated that it can provide a safe and elastic currency, to grant a monopoly of note issue to the central bank is better, in order that it may employ this function in connection with its responsibility for the stabilization of the credit situation.

Even a somewhat decentralized group of central institutions like our Federal Reserve Banks can be accorded much larger freedom in the issue of paper money than can be granted to an ordinary bank of the same size and excellence of management. The limitation of dividends to six per cent materially lessens the temptation to take chances. Along with the general spirit and nature of the Reserve Banks' operations, the note issue function serves to emphasize the great public responsibility that has been placed upon the Reserve System. Safeguards have been thrown about its exercise, but they are of a sort which make for safety without impairing elasticity. In every Reserve Bank and branch are stored large emergency supplies of Federal Reserve notes which are

available to all member banks, and through city correspondent relations with members, the non-member institutions supply their demand for additional currency. The federal government has also turned over to the Reserve Banks the task of seeing to it that the banks are supplied with the amounts of other kinds of money they require. Large forces of Federal Reserve employees are engaged in exchanging one kind of money for another and substituting new currency for that which is unfit to use.

When a member bank finds its supply of money insufficient to meet present or prospective calls from customers, it sends to the Federal Reserve Bank for more. It settles for the shipment by remitting a draft against its deposits there. If, in so doing, it reduces its balance to less than the amount required by law, it will borrow enough from the Reserve Bank to restore the account to its proper size. This process can go on so long as the supply of rediscountable paper or eligible collateral holds out, provided the total outstanding note issue does not exceed two and a half times the gold holdings of the Reserve Bank. Even then, this forty per cent requirement can be suspended, if, in the judgment of the Reserve Board, conditions warrant. Conversely, if a member bank finds that its supply of cash on hand is in excess of its present requirements or immediate future needs, it will send the surplus amount back to the Reserve Bank. The credit thus obtained will serve to retire its loan or pay for a purchase of securities or commercial paper. This is particularly true of gold coin or bullion which comes into the hands of large member institutions. Since gold is no longer used in pocket circulation, a shipment received from abroad will find its way to the Reserve Bank. Likewise, when a bank desires a supply of gold for export, it can obtain this from the Reserve Bank in the same manner as any other form of money.

We have pointed out that neither the metallic nor the paper

money issued by the United States Government is elastic and that the currency of the national banking system does not possess this quality. It was imperative, then, if we were to have an elastic element in our money, that there be selected as a basis for the Federal Reserve note a form of security whose supply is plentiful when more currency is needed and diminishes in amount when a contraction of the currency is desirable. It was for this reason that short-term business paper was selected, for in addition to its essential soundness, its volume varies with the changes in business activity and therefore with changes in the amount of money needed. If in a monetary system like ours, with a conglomeration of ten different kinds of money, one form of money is elastic, it makes the whole system elastic. Let us suppose, for example, that the banks of a rural community procure from their Reserve Bank a half million dollars in Federal Reserve notes and lend them to farmers who have the wages of harvest hands to pay. It does not impair the elasticity of our money as a whole, even if these particular notes do not return when the harvest season is over and the extra currency is no longer needed. Much of this particular lot of money will be spent in local stores and will find its way back to the banks which paid it out; but, even if much of it is carried off to distant parts of the country, the banks will find themselves in possession of surplus funds when the borrowing farmers repay their loans. These they will use to retire their several obligations to the Reserve Bank and thus contract the supply of credit in their community.

The laws of the United States have made distinctions between our various forms of money as to their ability to serve as a basis for monetary and credit expansion. Hence, at a time when the lawful reserve of a Federal Reserve Bank is at or near the forty per cent of gold specified as a minimum reserve for Federal Reserve notes, a shipment of gold or gold certificates to the Bank would be two and a half times

as efficacious as would a return of the Bank's notes. Coin, certificates, and greenbacks can all be counted as part of the lawful reserve of thirty-five per cent required to be held against deposits. Consequently, a shipment of silver dollars or greenbacks to a Reserve Bank would release more gold for use as note reserve and might thereby be as efficacious as a shipment of gold. National bank notes and Federal Reserve notes cannot be used as reserve. If the latter belong to the Reserve Bank in question, they are simply placed in temporary retirement. If they are the issues of other Reserve Banks, they must be sent home to them. National bank notes received are exchanged for some form of money which can be utilized as reserve.

The volume of national bank currency, as we shall see when we consider our various circulation moneys, has suffered a marked decrease since 1925, when a large issue of United States bonds, carrying the circulation privilege, was retired, and Congress failed to substitute other issues for them. Since the other forms of money are not capable of automatic expansion, the Federal Reserve note has filled the gap, and, in addition, has provided for the normal growth of money needs. In the period from 1917 to 1920, when prices of commodities and services reached new high marks, the greatly increased volume of pocket money required was supplied by the Federal Reserve note. With the marked decline in prices which followed the crisis of 1920, the volume of these notes has automatically adjusted itself to the lessened need. Contrasted with the peak of three and a half billions in November, 1920, it now stands at about two billions, or approximately one-half of the total paper currency in circulation.

Fundamentally, the creation of a spendable form of credit by a bank of deposit and issue is precisely the same process, whether the borrower receives a package of engraved circulating notes or a slip of paper showing that the amount of the loan has been credited to his deposit account. What he

desires is something suitable for making the type of payments he needs to make. If his creditors are laborers who do not want checks, he will have to take the bank notes (or some other kind of money). Otherwise he will make use of his loan by writing checks against the deposit credit which it made possible. In either case, the bank incurs the same liability, viz., that of cashing or redeeming these two types of credit instrument, the note and the check, when they are presented for payment. This will require that there be an adequate supply of cash on hand, and that a certain part of the earning assets be held in such form that they may readily be converted into cash, in case holders of checks and notes present their claims in larger number than was anticipated.

Creation of a spendable medium of exchange by the Federal Reserve Banks is essentially the same process as though they were dealing with the man on the street, instead of with member banks exclusively. Whether the group of rural banks in our illustration received aid from their Reserve Bank in the form of notes or an addition to their respective required deposits is immaterial. Both constitute an extension of Reserve Bank credit backed by customers' notes sent in for rediscount. The member bank cannot pass on to its customers, directly, the deposit credit it received at a Reserve Bank, but it can build its own extensions of credit upon the reserve thus provided.

In view of the long series of tragedies which have characterized the issue of paper money throughout the world's monetary history, not even central banks are accorded as much freedom in the exercise of the note issue privilege as in the creation of deposit credit. In the light of our unfortunate pre-Civil War paper money experiences and our penchant for elaborate restrictions upon all forms of banking activity, it is remarkable that so liberal provisions were set up with respect to the issue of Federal Reserve notes. In the original plan for the issue of Federal Reserve currency, as

drawn up in congressional committees, the whole process was left to the Reserve Banks, subject to such general restraints as to gold reserve and character of assets back of the issue as are usually imposed upon central banks. Here again, however, the Bryan wing of the Democratic party interposed objections which had to be met if a sufficient majority was to be had for the passage of the whole measure. Mr. Bryan had always regarded the issue of money as the prerogative of the state, and not to be delegated to any type of banking corporation. In order to placate his group, therefore, the plan was changed so as to make the Federal Reserve note a form of government paper money, guaranteed by the United States, and merely turned over to the several Reserve banks to use. This sounds like a clumsy roundabout process which would be likely to impair the elasticity of the reserve note, but in reality it has not interfered with their proper functioning. If some day a Federal Reserve Board should take too seriously its power of vetoing or modifying the requisitions of the banks for additional notes, or impose a burdensome charge for their use (a feature which the Act permits), it could destroy the elastic element in the notes. As it has worked out, thus far, the Board sees to it that its representative at each bank, the Federal Reserve agent, has a generous supply of notes in his part of the bank's vaults. As a matter of record he keeps the members of the Board informed as to the bank's demands upon him for notes. They have not undertaken to curtail these withdrawals or to impose a charge for the use of the notes.

Before a Federal Reserve agent can turn notes over to his Reserve Bank, the bank must place in his hands as collateral a like amount of gold, paper received from member banks or purchased in the open market, or a mixture of gold and paper. The bank, as was pointed out above, must own gold equal in amount to forty per cent of the Federal Reserve notes it places in circulation. It does not matter whether it

is in the bank's own vaults, on deposit with the agent, in the note redemption fund in the United States Treasury, or in the hands of the Federal Reserve Board as part of the nation-wide gold settlement fund. It all counts as lawful reserve. The function of this specie reserve is frequently misunderstood. It is not a large supplementary redemption fund, for it is the command of the law that it be maintained, not dissipated. It is not additional collateral in cases where the notes are already covered with commercial paper. It should be regarded rather as a sort of danger signal warning the Reserve Bank when as large a pyramid of credit has been created as is consistent with safe central banking policy.

On account of the constant maturing of the paper deposited as collateral, and the necessity of obtaining it from the Reserve agent and sending it home for collection, there is continual substitution going on which aids in giving elasticity to the monetary system; for if business has become less active, incoming money will be offered to the agent in return for the maturing paper, so that a contraction in the total circulation will be effected. If, on the other hand, business activity is increasing, more business paper will be presented to the agent as security for additional currency.

In confirmation of a practice which early grew up in the Reserve System, Congress, in 1917, provided for the issue of Reserve notes against a mixed deposit of gold and commercial paper, whereas under the original Act it was intended that the 40 per cent gold reserve should be held in addition to a 100 per cent deposit of commercial paper. At times when a heavy importation of gold was in progress, the banks turned over to the agents one hundred per cent gold backing for issues of Reserve notes. This virtually made gold certificates out of what was designed to be a currency with its highly elastic commercial paper backing. On the other hand, with the gold in their possession, the banks were able not only to issue the $100 in notes they exchanged for the gold

but an additional $150, inasmuch as they were required to have a gold reserve of but 40 per cent. The ability to issue $100 in notes on $40 worth of gold and $60 worth of commercial paper, as against the original requirement of $100 paper and $40 gold, undoubtedly magnified the inflationary influence of our large influx of gold and contributed to the extreme inflation culminating in the crisis of 1920. That the exchange of so many reserve notes for gold did not seriously cripple their elastic feature is evidenced by the fact that after the heavy price decline in the period following the peak of 1920, the volume of Reserve notes contracted approximately fifty per cent.

American business in pre-Federal Reserve days suffered greatly from the rigidity of our reserve requirements. The amount prescribed by the law was immutable, even though it was often responsible for inability to secure desperately needed financial aid, and for consequent business failures. The evil results of rigid requirements were so marked in the panic of 1907 that the authors of the Reserve Act were determined to make all requirements flexible. Therefore, while a forty per cent gold reserve is specified for notes, it is also provided that this may be suspended by the Reserve Board for thirty days, subject to renewal for periods of fifteen days thereafter. In order to hasten the restoration of the deficiency, a graduated tax is imposed, which the Reserve Banks are required to add to their discount rates. At first, the penalty is but one per cent, but it increases at so much more rapid a rate than the percentage of deficiency that it would soon put an end to demands for additional notes. In Germany a flat rate of five per cent is charged for expanding the issue of Reichsbank notes beyond the reserve limit.

England, as usual, has provided for her additional currency needs in a unique way. In July, 1928, the Bank of England took over the one pound and ten shilling currency notes, issued by the Government in 1914, and consolidated

them with the regular Bank of England note issue. A limit of £260 millions was placed upon the uncovered portion of the issue, but if the Bank can prove to the Treasury that more notes than this are needed, the latter grants permission for the increased amount for a period not to exceed six months. The permission is renewable up to two years. Meanwhile if the extra amount seems to be needed permanently, Parliament will have had time to study the situation and take appropriate action. In every case, Parliament reserves the right to disapprove the action of the Treasury in extending the limit.

The principle adopted for the Federal Reserve System seems, on its face, to possess the advantage of being more equitable than the German stationary rate and more automatic than the English practice, but has not been permitted to operate as yet. In the first years of the System, it was customary to compute the 35 per cent deposit reserve first. The remaining gold was then considered as the reserve back of Federal Reserve notes. During the period of feverish expansion following the Armistice, certain Reserve Banks found that this method left them with less than the required 40 per cent minimum and subjected them to the graduated tax. They therefore decided to reverse the process and have the deficiency appear in the deposit reserve. Congress had authorized penalties for deposit reserve deficiencies also, but had failed to provide a schedule, nor was it specified that they had to be passed on to borrowers. The Board had not constructed a schedule and took no action in the existing situation. The changed method of computation was quite as lawful as the old method had been. Furthermore, it was hardly fair to penalize the borrowers in districts where the expansion of Federal Reserve operations had had to go to great lengths in order to deal adequately with a critical credit situation. After all, the operations of the System should be regarded as a unit, and not as the transactions of twelve independent

enterprises. The condition of the combined reserves of the banks is the proper guide to restrictive action.

Enthusiasts for asset currency of twenty-five years ago would be keenly disappointed over the fifteen-year record of Federal Reserve note circulation. It was their idea that the United States would abandon all forms of money but gold, small change, and elastic notes. Largely on account of inertia and of the dictation of special interests, we still have our motley array of paper money and our clumsy silver dollar. The Federal Reserve note, to the extent that gold has been used as collateral, has not been elastic, but it has nevertheless imparted to our money supply as much of that desirable quality as has seemed to be needed. The advocates of asset currency overestimated the relative importance of elastic note issue in present-day business transactions, but the time will probably never come when this element will cease to form an important part of a soundly constructed currency system.

The framers of the Federal Reserve Act added to our already excessive array of various kinds of money still another form—the Federal Reserve bank note. It is easily confused with the Federal Reserve note, so far as its name goes, but it is entirely unlike it in other respects. It is practically identical with the national bank note, and was devised for possible use as a stop-gap between the retirement of the national bank currency and the complete acceptance of the Federal Reserve notes as our principal circulation money. The Aldrich Plan, which was the forerunner of the Federal Reserve legislation, provided definitely for the retirement of the national bank notes in twenty years, at the rate of one twentieth a year. For some reason, the authors of the Reserve Act were not willing to be so specific. They omitted all suggestion of compelling national banks to go out of the note-issuing business, and contented themselves with making such a step as agreeable as possible. Because of the circulation privilege which went with them, the Government had

been able to sell to the national banks at par a large quantity of bonds bearing but 2 per cent interest. If a national association gave up the note issue privilege, these bonds would have to sell on a purely investment basis. Inasmuch as a fair rate of return for a Government bond was about 3 per cent, a bank offering 2's would have to take a heavy loss. In order to meet this difficulty and to provide for an easy transition between the possible disappearance of national bank currency and the full use of Federal Reserve notes, the Reserve Banks (1) were empowered to buy on the market bonds with circulating privilege, and (2) could be required by the Board to take annually up to twenty-five million dollars worth offered them by national banks through the United States Treasury.

Bonds acquired under either of the above arrangements could be used as the basis for the issue of Federal Reserve bank notes. If, however, a Reserve Bank had been required to buy a block of bonds and did not choose to exercise the note issue privilege, it could exchange them at the Treasury for three per cent securities which bore no circulation privilege.

Up to the spring of 1917, when the entry of the United States into the war caused the rate on Government loans to go to four per cent and above, the Reserve Banks had acquired some 74 million dollars' worth of 2's surrendered by national banks which were retiring their notes. This represented approximately one-tenth of the national bank currency. One or two Reserve Banks undertook to issue Federal Reserve bank notes upon the bonds they held, but this move was frowned upon by the Reserve Board which had no desire to see this inelastic type of currency perpetuated. The gap left by the retired national bank notes was readily filled by the elastic Federal Reserve note. Since it was obviously unfair to compel the Reserve Banks to acquire any more three per cent government obligations, and since the scarcity of money

had put a decided check upon the desire of national banks to retire their notes, the Reserve Board suspended the arrangement and it has never been reinstituted. The national bank note circulation underwent a second contraction in 1925, but it was due to the maturing of a large issue of 2's and not to Reserve Bank purchases.

In 1918, the Federal Reserve bank note was called into being for what was really its first employment of any consequence, and it is to be hoped, its final appearance. This time, it was put to a use which was entirely foreign to that for which it had been devised. Our ally, the British Empire, needed a large amount of silver to stabilize the monetary structure of India. The natives will not use paper currency, and the gold and silver coins were inadequate to carry on business where prices were rising and where the custom prevails of appropriating large numbers of pieces for ornaments. A state of serious unrest in India would have cut off large supplies of essential war materials and added greatly to the burdens of the military and naval forces of the Allies. Since silver was exceedingly hard to obtain on the market, the United States came to the rescue by selling to Great Britain some two hundred million fine ounces obtained from silver dollars which had lain in the Treasury for years, as the security for silver certificates. Unfortunately, the retail trade of the country was relying almost entirely upon this form of money for its one- and two-dollar bills. With prices soaring, it was particularly desirable that some other kind of currency be provided in even more generous amounts if the certificates were called in. The Reserve Board favored the issue of Federal Reserve notes in one- and two-dollar denominations because, as we have seen, their volume adjusts itself nicely to the need for them. Their wishes were ignored, however, and the Federal Reserve bank note was used instead. The Government was borrowing money at a prodigious rate; so it was not difficult to provide a form of obligation to serve as security for the

new issue. A special form of certificate of indebtedness and one-year gold notes of the Treasury were employed. As prices kept on rising, more and more large change was demanded, so that a total of $270,000,000 was reached in the circulation of one- and two-dollar reserve bank notes at the peak in January, 1920. In 1921, the Treasury began to replace the silver it sold to Great Britain and to issue new silver dollars and certificates. As these appeared, the Federal Reserve bank notes were retired.

In spite of this emergency use to which they were put, the Reserve bank notes have not justified their creation. There was no such transition need for a new type of bond-secured currency as their sponsors anticipated. When put to an entirely different use, they performed their work acceptably, but the Federal Reserve note might just as well have been used.

3. The Reserve System as an Emergency Currency Reservoir—Deposit Credit

We have been stressing continually the much greater importance, nowadays, of a reserve supply of deposit credit, as opposed to bank notes. In times past, England, for example, has succeeded remarkably well with no legal provision for an emergency supply of money. The use of checks has been highly developed and the banking system so constructed that adequate means of payment were normally available. On occasions, however, the Bank Act has had to be suspended in order to secure emergency Bank of England notes, and in 1914, by special law, a large supply of one pound and ten shilling government notes was hurried into circulation to meet the monetary crisis precipitated by the outbreak of the war. If England's money had been as elastic as her bank credit, she would have taken care of the emergency automatically. Before 1914, the United States was deficient as

respects both her monetary and her banking organizations. We have seen how the defect in our monetary system was remedied. We shall now examine at some length the mechanism we have set up for assuring an adequate supply of deposit credit.

Most bank loans are taken by the borrower in the form of a credit to his account. Whenever such a loan is made, therefore, it increases the bank's deposits and obligates it to carry a larger minimum reserve with its Federal Reserve Bank, if it is a member of the System. The group of rural banks we mentioned would increase their reserve requirement by $700 for every $10,000 increase that occurred in their demand deposits. If a $10,000 loan is left as a deposit, and the bank's account with its Reserve Bank is at the minimum, it will have to send the Reserve Bank acceptable funds to the amount of $700 or borrow from the bank. In times of marked business activity in its community, it will probably have to resort to the latter alternative. In this case it will either sell customers' notes and bills to the Reserve Bank, or will give its own note secured by borrowers' paper or by obligations of the United States.

Since the Reserve Bank bears a very important public responsibility, it must exercise more caution than is the case with an ordinary bank. Both the safety and the liquidity of the loan must be carefully scrutinized. For this purpose the Reserve Banks have built up elaborate credit files and developed a high degree of facility in ascertaining the real merit of member banks' offerings. In the case of larger transactions, a complete financial statement from the maker is required. Direct loans to members are limited to fifteen days' maturity, while customers' paper offered must have no more than ninety days to run, except for certain types of agricultural loans which grow out of operations requiring a longer time to complete.

In a system which stresses its strictly commercial banking

character, the determination of the purpose for which a customer's obligation was incurred is a matter of importance. It will not accept paper which arose from an investment or speculative transaction. The Act itself and all of the regulations and decisions of the Reserve Board are directed toward the object of financing the short-term self-liquidating operations of agriculture, industry, and commerce. But, as has been pointed out, there is nothing to hinder a member bank, after it has replenished its reserve with a discount of perfectly acceptable commercial paper, from using this accommodation as the basis of loans to speculators and investors, aggregating several times the amount of its increase in reserve, although in the recent peak of speculation Reserve Banks have refused to rediscount paper for members who were lending to stock brokers.

It will be recalled that American business practice differs from that of European countries in respect to the method of financing the short-time or current needs of business. In Europe the movement of goods from producer to consumer is financed largely by the use of time drafts or bills of exchange drawn by the seller upon the buyer, who accepts and returns them. Since the seller is usually in immediate need of the proceeds of his sale, he will endorse the draft and sell it to a bank. In the United States, the promissory note is employed in almost every sort of transaction. The speculator in stocks uses it to borrow for perhaps a day at a time. The farmer and the merchant employ it in financing their current operations, while all types of borrowers, both individual and corporate, use it as the instrument by which long-term loans are procured.

The ordinary promissory note usually gives no indication on its face as to which of many types of transaction it represents. On the other hand, a draft drawn by a well-known manufacturer upon a retail department store would present quite conclusive evidence on its face that the instrument grew

out of a sale of goods which in the normal course of events will produce the means of meeting the draft before the due date arrives. The determination of the eligibility of most of the paper offered for discount in the United States is a more difficult task than it is in countries which employ the commercial draft or "trade bill" almost exclusively.

The power given to the Federal Reserve Board of interpreting the rather broad provisions of the Reserve Act relating to the eligibility of paper is probably the most important function it has been called upon to perform. Its decisions have moulded the character of Federal Reserve Bank operation. It has been a difficult task to enforce high standards, once they were adopted. American business men and farmers have been accustomed to establish more or less permanent lines of credit at their banks. A periodical "clean-up" is usually required, but the accommodation is often regarded by the borrower as a continuing one. It can readily be seen that notes arising from this sort of borrowing are not so definitely self-liquidating as is a European's draft upon his merchant customer. Europeans also obtain lines of credit at their banks but use them by a system of legalized overdrawing of checks instead of making out promissory notes as we do in America. The European discount market, then, has only the trade bill to deal with, while with us, lines of credit give rise principally to promissory notes, whether the credit is used strictly in the current operations of business or not. Out of the mass of promissory notes in the ordinary bank's portfolio, the Reserve Banks accept as suitable for their portfolios only those which represent actual commercial or agricultural transactions and bear the names of persons or firms whose affairs are in liquid condition.

Our bankers have been accustomed, particularly in the smaller communities, to rely upon personal impressions in making loans to their clientele of farmers and country merchants. Such borrowers had not been accustomed to present-

ing financial statements. Under the influence of the Federal Reserve System, marked progress has been made in placing the process of credit-granting in country banks upon a more business-like basis.

The Reserve System has had to relax somewhat the strict standards of eligibility it set up at the beginning of its operations. As we have noted, the period preceding our entrance into the war was, for the most part, characterized by failure of the member banks to employ the System's rediscount facilities. The liberal reduction in reserve requirements had enabled members to increase their loans to customers materially without having to seek Reserve Bank assistance. If country banks needed help in their spring and fall financing operations, they sought it from their city correspondents, whose eligibility requirements were not so strict as those of the Reserve System.

In its efforts to secure some earning assets to support the expensive machinery of the System and to educate members in the use of Federal Reserve facilities, the Board, in 1915, relaxed materially some of the requirements it had set up. For all loans of $2500 or less it waived the rule that a borrower's statement be submitted to a Reserve Bank, and substituted for it an assurance from the member bank that its client's affairs were in a satisfactory condition. As doubtful cases came up to the Board for decision, from time to time, it tended toward greater liberality in the interpretation of its eligibility rules. Unfortunately, when the feverish activity of the war and early post-war period brought a perfect deluge of business to the Reserve Banks, some of the precedents established in the lean years arose to plague the officials of the System.

American bank portfolios are composed, in large part, of promissory notes secured by collateral, much of which is not of a self-liquidating character, and is banned by the Reserve Act from the rediscount privilege. It was assumed that every

member bank would have enough paper unquestionably of commercial character to enable it to obtain all of the assistance it should ever need at a Reserve Bank. It was soon found, however, that members were not satisfied with this one means of access to the System's credit facilities. They felt the need of an arrangement whereby direct loans could be had for very brief periods. In the process of adjusting their reserve position, member banks, particularly in the money centers, borrow from and repay their Reserve Banks with great frequency. In New York, for example, it was found that in 1925 the length of the average advance or rediscount was but five days. It is more convenient to make one large note for the sum required than to sell a miscellaneous assortment of customers' paper of various amounts and maturities. If a bank can borrow on its own promissory note, instead of selling customers' notes, it can replenish its account at the Reserve Bank without advertising the fact through the endorsements which appear when the latter method is employed.

In September, 1916, Congress yielded to the appeal for direct borrowing arrangements, by amending the Reserve Act so as to provide for advances to member banks on their own promissory notes, for periods not to exceed fifteen days. There must accompany the note as collateral security either, (1) securities of the United States Government, or (2) commercial paper of a kind which would be eligible for purchase by a Reserve Bank. Government obligations can scarcely be considered self-liquidating in character, and yet the market for them is so extremely broad that they have almost perfect liquidity.

There was no serious prospect of our entering the war at the time the amendment was passed. Consequently, the provision for borrowing upon government obligations was inserted with little realization that it was to become a powerful instrument of war finance before another year had passed. By the

summer of 1917, the succession of huge war loans had begun, and member banks found themselves with heavy allotments of Liberty Bonds which could be absorbed by investors only if some sort of partial payment plan were devised. In order to assist the banks in carrying this great burden, the Reserve Banks permitted them to borrow at very low rates, and to use their allotments of Liberty Bonds and United States certificates of indebtedness as collateral.

In 1920, the peak year of credit expansion, collateral loans to members amounted to $55,565,000,000 out of the total loan and discount volume of 85 billion dollars. Of this total of more than 55 billions, all but a hundred fifty millions was secured by war paper. Not only did member banks finance the sale of war bonds in this way, but many found it an easy way to expand their general credit operations. Signing a note and putting some of its ever-present supply of government bonds in the collateral envelope was much simpler than bothering with the financial standing of borrowers, the object for which their indebtedness was incurred, or any of the other troublesome details encountered when commercial paper was offered for rediscount. Furthermore, this new use for government securities in an era of unprecedented profit-making caused the banks to accept their heavy allotments of each Liberty Bond and certificate of indebtedness issue with much better grace. Thus the cause of the Allies was greatly aided by the 1916 amendment to the Reserve Act. So also was the orgy of inflation which culminated in 1920.

Had it not been for the war, it is not likely that the privileges conferred by the amendment would ever have been abused. A very much larger proportion of eligible commercial paper would be employed, especially in view of the fact that the total obligations of the United States at the time the amendment was passed were less than a billion dollars, of which some seven hundred million dollars was unavailable, being held in the Treasury as security for national bank

notes. As soon as the period of war finance had passed, the Reserve officials ceased to foster collateral loans. They rescinded the preferential rate this class of paper had enjoyed over commercial paper, and in other ways sought to restore the latter to its rightful place in the portfolios of the Reserve Banks. The collateral loan is still, however, the favorite means of securing accommodation at a Reserve Bank. The figures for January 2, 1929, with a total of 757 millions in loans on the security of obligations of the United States, as against 394 millions arising from the discount of commercial paper, illustrate about the typical numerical relationship of these two items. On the whole, the provision is a most commendable addition to Federal Reserve machinery, and is not likely to be abused again, unless the United States becomes involved in another great war.

Those who framed our Federal Reserve legislation undoubtedly had in mind that this group of central banks would have their assets in such form that an inexhaustible supply of supplementary credit would be available to the banking system, but its use would not inflate the price level. It was their belief that if they recognized only self-liquidating borrowing, there would, in the nature of the case, be no inflation. A commercial transaction would create its own medium of exchange in the form of bank credit arising out of the discount of a note or draft based on the transaction. It would likewise extinguish this same medium of exchange by the payment of the note or draft out of the final sale of the goods involved in the transaction. This sort of credit operation would be proof against inflation, for there would always be just as much but no more medium of exchange created than would be needed to finance the transaction. Member banks, however, continue to lend their funds to speculators in securities and staple commodities and to investors, but from the standpoint of their own selfish interest they keep a substantial part of their assets in commercial paper. We have recently

witnessed an unparalleled expansion in stock market operations and yet the banks most heavily involved in financing them have not only taken adequate care of their commercial borrowers, but have had in their portfolios much more eligible paper than they required. If the proceeds of a rediscount were used solely for financing self-liquidating operations, the Reserve System would not be a party to inflation, but when a rediscount of the most flawless commercial paper is used as the basis for pyramiding a large volume of credit to the stock market, the Reserve Banks are instrumentalities of inflation. After all, then, the task of keeping the credit situation well in hand cannot be accomplished by strict definition of the kind of paper the central bank organization will accept for discount.

Granting that the non-commercial clients of banks have a legitimate claim upon them for accommodation, the concern of the Reserve System should be (1) that the commercial clients receive their full share of accommodation at reasonable rates, and (2) that the credit volume of an individual bank and of the whole group of banks does not exceed a limit consistent with continued credit stability. The Reserve System has accomplished the first of these in adequate fashion, and is striving to develop effective means for accomplishing the second. Thus far it has met with only indifferent success.

It is easy to criticize banks and public officials, after the evil aftermath of a huge inflation has done its deadly work, because they did not prevent business men from going to extremes in their lust for profits. Undoubtedly, in the war and post-war inflation of 1917–20, all bankers, even those in charge of the twelve Reserve Banks, caught the incautious spirit of the times and lost sight, temporarily, of their rôle as guardians of the stability and safety of the economic structure. Unparalleled demands for products to win the war and unparalleled opportunities for gain created an atmosphere of liberality in credit matters. The Federal Reserve Banks,

being human institutions, contributed to the overexpansion and the collapse which ensued. They, themselves, suffered some losses from uncollectible paper, but, through their inside knowledge of conditions in all member banks, were able to get possession of some of the choicest of an embarrassed bank's assets as additional collateral. This protected the solvency of the Reserve Bank but was rather hard on the depositors of the embarrassed institution, for many of them have failed and the creditors other than the Reserve Bank have had to take what was left of the collectible assets.

Thus we see that there has been little or no question as to the ability of the Reserve System to provide an adequate supply of deposit currency to the customers of members by way of the privilege members have of borrowing to build up their lawful reserves. What criticism there has been along this line has been directed at the over-generosity of the System during a period when some powerful restraining influence was needed.

4. Other Contributions of the Reserve System to the Supply of Money and Credit

Thus far we have assumed that the Reserve Banks' sole contribution to the credit resources of the nation comes through advances of a single Reserve Bank to its members. If such were the case, there could be no semblance of unity in respect to our banking resources or credit policy. In the first place, occasions arise on which the resources of a single Reserve Bank are inadequate to meet the demands upon it. To cope with such situations, the other Reserve Banks are permitted, or may be required by the Reserve Board, to take over some of the loans of their over-burdened sister institutions. In the post-war crisis of 1920, the eastern Reserve Banks, without waiting for the Board's command, came to the

rescue of those located in areas where the agricultural depression had hit the hardest.

In the next place, the System could not fill its position as the stabilizer of credit conditions, unless, in addition to its control of the flow of credit to members, it had a contact with the rest of the financial machinery of the country through the open market. Most of the banks do not belong to the Reserve System and there are numerous other institutions, like bill brokers, foreign bankers, and dealers in United States securities, with whom the Reserve Banks should be permitted to deal in carrying out an open market policy.

Under the terms of the Reserve Act, the banks may purchase in the open market government securities, bankers' acceptances, municipal warrants and the obligations of the Federal Land Banks. Only with respect to government securities may the Reserve Banks take the initiative. The others they purchase only as they are offered. We shall give more attention to the underlying character of these operations when we consider the part they play in the enforcement of the Reserve System's discount policy.

In connection with the bankers' acceptance, the Reserve System authorities have undertaken to build up a national discount market. The Reserve Act granted to national banks the privilege of accepting bills drawn upon them. The hope was that this supplementary source of credit might be a valuable addition to the supply of funds borrowers obtain at banks and through their commercial paper houses, for after a recognized bank has accepted one's draft against it, the draft is readily salable at a low rate of discount. With an accepted bankers' bill in one's possession, in addition to a line of credit at a bank, the danger of over-extending one's obligations would seem to be great. In fact, this is what did happen during the war. The best safeguard against such a condition is for a borrower to provide for his general credit requirements at his own bank, and to restrict the use of the

bankers' acceptance to financing the movement of a specific lot of commodities to market. In this case the acceptance will have its own security back of it and will not have to depend, along with the home bank, upon the general financial condition of the drawer of the bill. Since bankers' bills were practically an innovation in American banking and no attempt had been made to develop a national discount market in which such paper could be sold, the Federal Reserve Banks were empowered to buy them from sellers on the open market, and thus encourage their widespread use in commercial financing and their purchase as a temporary employment for accumulated funds. The bringing of the great resources of the Federal Reserve into this type of financing meant low cost of financing for the merchant borrower and perfect liquidity for the short-term investor who made use of bankers' acceptances.

In our brief consideration of international banking, we saw that American business firms had long employed bankers' acceptances in financing the importation of goods, but that these instruments were drawn almost entirely upon the bankers of London and other foreign money centers. The grant of the accepting privilege to national banks was followed by similar action by the states in behalf of the banks and trust companies chartered by them. This change in our laws was coupled with the advantage of being a neutral nation when the rest of the great financial centers were operating under the handicap of war. As a result, the development of an American bankers' acceptance received a great impetus. Not only did our bankers gain practically the whole of our own import and export financing, but other nations which had been accustomed to look to Europe for this service began to carry on their foreign trade under letters of credit obtained from New York banks and to draw dollar drafts under these letters. Since the war, most of the foreign patronage has returned to European bankers, but Ameri-

can shippers have continued to look to our own bankers for their financing.

Since the function of the Federal Reserve System in the acceptance business is our primary interest in the subject at this point, we shall examine more closely the part the Reserve Banks play. Let us take for an example the case of a Kentucky tobacco firm. They have shipped a large consignment of their product to a London tobacconist. Instead of having to wait for the three months specified in the draft the firm has drawn against the shipment, they can borrow a large part of the amount from a local bank, but they would be required to pay the prevailing rate of interest, say 6 or 7 per cent. If, instead, they draw a bankers' acceptance against a New York bank and secure the bank's acceptance upon it, they can sell it on the open market at a discount of from 3 to 4 per cent. Even when the New York bank's accepting fee of say 1 per cent is added, the tobacco firm has saved a considerable sum. This saving is partly due, of course, to the amount and the high type of the security back of a bankers' export bill of this sort, but the willingness of the Reserve Banks to buy bankers' bills at all times at the prevailing market price is also an important factor.

The Reserve System is the mainstay of the brokers who make a specialty of bankers' acceptances. This business requires a large amount of capital, which is normally obtained at a favorable rate on the regular call loan market. When, as occasionally happens, call rates become excessive, the acceptance broker sells some of his holdings of bills to the Reserve Banks, either outright or with the privilege of buying them back within fifteen days.

Member banks find the bankers' acceptance a most convenient instrument for restoring a deficient reserve at the Reserve Bank. Instead of borrowing and having the obligation show on the published statement, a member having a supply of bankers' acceptances among its assets can merely sell to

the bank the amount required to bring its reserve up to the legal requirement. Thus the acceptance has come to be a valuable adjunct to the other means by which the Reserve System comes to the aid of the rest of our financial system. Through its purchase of acceptances, the System opens a new avenue by which its resources are available to the individual user of credit. He not only profits indirectly from the accommodation his bank obtains at a Reserve Bank, but by drawing an acceptance he taps an additional supply to which the Reserve System is a heavy contributor.

Notwithstanding the rapid growth in the volume of bankers' acceptances in the United States, and a breadth of appeal to investors which has attracted funds to New York from banks of foreign countries, these instruments are still more or less in the coddling stage. The Federal Reserve Banks still have to hold a large part of the total volume, in order to assure an adequate market. The stock exchange continues to be too strong a competitor for surplus funds. Normally, it provides as high liquidity as a bankers' acceptance and, most of the time, yields a considerably higher return.

Some writers have attributed the failure of the bankers' acceptance to assume the leadership in money market transactions to its misuse during the war. Since practically every form of credit instrument was abused during the period of inflation, it is doubtful if the improper use of the acceptance was conspicuous enough to leave a lasting bad impression upon investors. When one considers that the volume of bank acceptances outstanding at present is as great after only fifteen years as the volume of commercial paper is after more than fifty years, the showing of the former cannot be regarded as disappointing. It is difficult to change financial practices. The institutions from all over the United States and elsewhere which loaned more than four billions on the stock market during 1928 and 1929 did not place their money there because of any lack of confidence in the accept-

ance as a high-grade investment medium. They were actuated by two factors, viz., the extremely attractive call loan rates which had prevailed for many months, and the fact that they had become habituated to employing their surplus funds on the stock market.

The original Reserve Act took into account the fact that bankers' acceptances if not properly used can become a dangerous instrument of inflation. For that reason it limited their employment to the financing of imports and exports, and forbade any bank to accept to an amount exceeding one-half of its capital and surplus, and no acceptance was to have a term of more than three months. Within a few months, in response to an appeal from banks who felt they were hampered too much by the narrow upper limit placed upon their operations, Congress provided that banks which received the Reserve Board's specific approval could increase their limit to one hundred per cent of capital and surplus. Now that the liberalization process had begun, it continued to break down some of the lofty barriers with which the acceptance had been surrounded. In 1915, France asked a prominent New York banking house to arrange for the financing of heavy munitions purchases in the United States. This house saw that if the great resources of the Reserve System could be tapped through the purchase by the Reserve Banks of bankers' acceptances, the financing could be done on decidedly favorable terms by employing this device. It had never been intended that these bills should be used for non-commercial transactions like the sale of war materials. Furthermore, France did not expect to repay the loan for two years. The authorized life of an acceptance was three months. It would be necessary, then, to have an understanding to the effect that this issue would be renewed seven times.

The Reserve Board was so greatly impressed with the great opportunity the war had presented for extending our foreign trade that it approved this radical departure from the orig-

inal conception of the acceptance as a select type of self-liquidating trade paper. The Reserve Banks refused to promise in advance that they would renew these bills every three months, but they did continue to do so, in spite of the fact that the transaction out of which the original acceptance arose had become a matter of history.

During the entire period of the war, bankers were disposed to stretch the regulations governing the bankers' acceptance. The higher the ordinary bank loan rates soared, the greater was the pressure to convert the acceptance into a mere accommodation loan of relatively long term. As the excesses of war finance disappeared, banks again became disposed to employ these bills in the manner originally intended. With an amendment in 1916, extending their use to include domestic shipments and the three months' term to six, they are able to make a most useful contribution to the machinery for financing shipments of merchandise and storage of readily salable staple products.

A study of bankers' bills at the close of 1926 revealed the following distribution:

	Per cent
Imports of merchandise	38
Exports of merchandise	35
Domestic warehoused goods	15
Domestic shipments	4
Shipments between foreign countries	5
Dollar exchange	3

The financing of cotton shipments accounted for nearly half of the volume of bankers' bills purchased by the Reserve Banks in 1926. Sugar, coffee, silk, grain, and rubber followed in the order named.

In our study of the internal policies and practices of American banking, we found that for more than half a century, the so-called trade discount system has prevailed in the settlement of merchandise sales to retailers. Rather than forgo

the generous saving offered for paying one's bill within ten days, the retailer will borrow the money with which to make the payment. This he usually does by giving the bank his unsecured note. His other alternative is to let the obligation stand on his creditor's books for the thirty, sixty, or ninety days specified in the terms of sale. As a result, the cash discount, the merchant's note, and the open account have become the basic instruments of American short-term finance. The authors of the Reserve Act were greatly impressed with the broad discount markets which prevail in other leading countries. Instead of reposing in the portfolio of a retail merchant's bank, the paper arising out of sales of goods to European merchants by their wholesale firms is sold freely all over the country and consequently secures a better rate. Much of this mobility of European paper is due to the fact that when a wholesale house sends out a shipment to the retailer, it draws a time draft or bill of exchange, which the retailer accepts and returns. This trade acceptance, as we have styled it in the United States, lends itself readily to sale over a wide area. The presence of the two known business names is fairly conclusive evidence as to the nature of the transaction. It is a reasonable assumption that the retailer has received a quantity of seasonable merchandise from the wholesaler and that its sale to the public will provide the funds necessary to meet the obligation when it is due. The acceptance by the retailer and subsequent endorsement by the wholesaler, plus one or more bank endorsements which may be placed on the bill by virtue of subsequent changes of hands, add further to its security.

The single name paper of a retailer, on the other hand, bears no evidence of the object of the loan and contains but the one business name. It will, therefore, other things being equal, have a much more restricted appeal as a piece of paper for the employment of the idle funds of banks or corporations.

The Federal Reserve Board, from the start, has favored the trade acceptance as a commercial banking instrument. It accorded it preferential discount rates and aided in the organized move to further its use. Considerable progress has been made in substituting trade acceptances for open book accounts, but the practice of borrowing upon a single name note in order to take a cash discount seems too firmly rooted to be disturbed. The retailer will continue, therefore, to provide this type of paper to the banking system if he takes his discount. If he does not, and signs trade acceptances, the wholesaler will provide the banking system with these acceptances, instead of borrowing on his note, backed by his array of accounts receivable. Wholesalers are offering too large an inducement when they give a retailer a discount of 2 per cent for paying his bill twenty days earlier than if he permitted it to run the full thirty days granted by most firms. This amounts to an annual interest rate of 37.2 per cent. It seems useless, however, to change this practice which arose in days when interest rates were high and mercantile credit was in a chaotic state. The best we can do is to transform as many open book accounts as possible into trade acceptances, in order that the wholesaler may have a broader market in which to finance himself and thereby secure more favorable rates and lower his cost of doing business.

Unfortunately, the trade acceptance, like the banker's acceptance, has been the victim of misuse. Wholesale houses and manufacturers have employed it as a collection instrument instead of a high-grade credit device. Instead of sending it out with the invoice at the time the goods were shipped, it has been withheld till the open account became overdue and was then sent in the hope that the frozen obligation could be thawed by converting it into bankable paper. Some firms have given retailers their choice of a thirty-day book account or a sixty-day trade acceptance, thereby decreasing the liquidity of commercial transactions. Even a desirable form of

credit instrument like the trade acceptance cannot metamorphose questionable accounts into high-grade credit risks. The use of these two-name drafts in place of book credit in no way obviates the necessity for complete credit information regarding the parties liable for their payment.

5. Summary of the Results of Federal Reserve Operations to the Credit System

The provision of a supplementary supply of money and credit was the principal object for which the Reserve System was created. In this it was intended to aid only the current operations of the farmer, the manufacturer, and the merchant in the production and marketing of useful commodities. It was to lend no support to speculative or long-term investment transactions. It was expected to reduce the great disparity in interest rates between the industrial sections of the North and East and the agricultural and livestock areas of the South and West, by increasing the credit facilities of the latter regions and providing for a greater fluidity in loanable funds. Disgraceful money panics like that of 1907 were expected to be permanently eliminated. In short, through all sorts of financial weather, the short-time or commercial credit requirements of borrowers everywhere would be amply met.

A fifteen-year period full of extraordinary situations is hardly sufficient to justify final judgment with respect to all of these objectives. Some of them have been completely or nearly achieved, while others have met only partially the expectations of their sponsors. The old-time money panic has probably gone for all time, with the availability of practically unlimited quantities of Federal Reserve notes, supplemented by an elastic supply of deposit credit. Cyclical and seasonal extremes in interest rates have been lessened and the old spring and fall periods of credit stringency have become a thing of the past.

The difference in interest charges between East and West has not been eliminated, but with the establishment of regional banks and the development of outside sources of credit supply like the bank acceptance market, the rate-leveling process has made progress.

The System, as we have repeatedly observed, has not been able to withhold its aid from the fields of investment and speculation, in spite of the safeguards which were set up with that end in view.

The tremendous credit expansion of the war period demonstrated that demands upon our reservoirs of money and credit could be met, even though they far exceeded the wildest imaginings of the Reserve System's founders.

Two highly desirable credit instruments previously little used in the United States, the bankers' and the trade acceptance, have been fostered by the Reserve System. Unfortunately, their employment in ways which had never been intended caused them to acquire a measure of disrepute which hampered their legitimate growth. Since the war, however, the bankers' acceptance has made rapid strides along highly useful and desirable lines.

BIBLIOGRAPHICAL NOTE

In addition to the books already suggested for the study of the Federal Reserve System (End of Chapter V) one should consult B. H. Beckhart, *The Discount Policy of the Federal Reserve System* (New York, 1924), and L. D. Edie, *Money, Bank Credit and Prices* (New York, 1928), for a more intensive treatment of those Federal Reserve operations which have a direct bearing upon the supply of money and credit.

The Federal Reserve bank note has been dealt with fully by E. E. Cummins, in the *Journal of Political Economy* for October, 1924.

Silver purchases under the Pittman Act formed the subject for an inquiry by the Banking and Currency Committee of the United States Senate, 68th Congress, 1st Session (1924). The hearings have been published as a public document.

For purposes of comparing the English situation with our own, one should read W. F. Spalding, *The London Money Market* (London, 1924).

CHAPTER VII

POLICIES RELATING TO THE SERVICE FUNCTIONS OF CENTRAL BANKING

1. The Nature of the Problem

In a sense, all of the activities of a central banking organization like the Federal Reserve System have as their object service to public and private business, but in this chapter we shall be concerned with those services which are designed to facilitate the daily receipt and expenditure of funds by the Treasury and the general public.

As bankers for the government, the Reserve Banks have relieved the Treasury of duties which it had never performed with the efficiency of which a central banking system is capable, and in so doing they have indirectly benefited the general public. The facilitation of the Treasury's flotation of loans; the collection, safekeeping, and disbursement of public moneys, the supplying and replacement of bills and coin in our general circulation—these are the most conspicuous of the services rendered the United States Government by the Reserve System. In addition, the business of both the government and the general public has profited greatly from the Federal Reserve par collection system and its accompanying facilities for the transfer of the ownership of money from one section of the country to another.

All of these services seem so simple and obvious that their performance would not appear to involve any important ques-

tions of policy, and yet there has waged around this branch of Federal Reserve operation, particularly the collection system, the most bitter opposition that the officials of the Federal Reserve System have yet had to face.

Quite generally, in other countries, the central bank has acted as the fiscal agent of the ministry of finance. It has stood ready to discount large volumes of short-term treasury obligations, whenever money market conditions indicated the desirability of such action. Moreover, the finance ministry, in most cases, has confined itself merely to the formulation of fiscal policy and has left the details of its execution entirely to the central bank. In the United States, the absence of central banking facilities for a period of over three-quarters of a century (1836–1914) made it expedient (particularly from a political standpoint) to move rather deliberately in shifting from our Independent Treasury system to the employment of the Reserve Banks as the government's principal bankers. In the fifteen years which have elapsed since the inauguration of the Reserve System, marked progress has been made in substituting the facilities of the Reserve Banks for old and inefficient methods; but, as we shall see, there still remain in the present mechanism vestiges of the old combination of Treasury and depositary banks which carried on the government's financial affairs.

In the field of check collection and money transfers, likewise, the leading central banks of Continental Europe with their numerous branches and agencies have been able to develop simple and effective systems for making out-of-town payments. In these countries persons who have frequent remittances to make carry so-called transfer accounts at the nearest office of the central bank, and merely instruct this branch to credit the payee's account in the branch with which the latter does business. The fact that ordinary personal checks are not employed to any extent in making out-of-town remittances, and that banking is concentrated in the hands of

a few great branch institutions, makes the problem of clearance and collection much more simple than that which confronts the United States with the checks of over twenty-seven thousand independent banks being sent to every part of the nation. England has carried the use of checks much farther than prevails elsewhere in Europe, but here too the fact that four-fifths of the banking resources are in the hands of four or five London banks makes the problem of settlement comparatively simple. The Bank of England with but nine branches outside of London plays only a small part in the aggregate of out-of-town settlements.

In the United States everything has conspired to make the inauguration of a simple, effective, nation-wide clearing system a most difficult task. Not only is the personal check used to the fullest extent in making local payments, but in spite of obstacles once placed in the way of its use by urban business, it has all but supplanted the draft and money order in settlements made by mail. The return of such items to a drawee bank and the remittance by it of the proceeds involve an expenditure of time and money, in return for which both the collecting and remitting banks have considered that they were entitled to a reimbursement in excess of the actual cost. In spite of the marked reduction in collection expense, brought about by a gradual linking together of American banks through the correspondent relationship and consequent reciprocal agreements to eliminate remittance charges, the inauguration of the Federal Reserve System still found the process of check collection far too clumsy and costly.

The framers of the Reserve Act had recognized in the central banking mechanism an ideal device for solving the problem of nation-wide clearance and collection. From the standpoint of the Reserve System itself, they saw the desirability of adding some regular daily services to the function of supplying emergency credit and currency. For if the pro-

posed Reserve Banks were to confine their activities to the occasional rediscounting of members' paper and the issuing of emergency supplies of Reserve notes, their operations would be lacking in continuity, and a strong permanent working organization could not be maintained. It is much easier for a central bank to assert its position of leadership among a large and miscellaneous group of banks when it has constant avenues of contact with them.

Obvious as was the advantage to both the Reserve Banks and the public, the subsequent inauguration of a nation-wide clearing system was accompanied by most disappointing and unpleasant complications. The hostility aroused by the inauguration of the principle of par remittance, and particularly by the methods employed by certain Reserve Banks in attempting to secure its universal adoption, has given to the whole subject an importance which it would not ordinarily merit.

Our interest here is primarily in the questions of policy raised by the par remittance controversy, rather than in the mere mechanics of out-of-town collections, but it is desirable to review briefly the conditions which prevailed previous to the inauguration of the present system if we are to understand clearly the issues involved.

The assumption by the Reserve System of services connected with the currency and the national revenues has aroused no serious opposition in any quarter, but it deserves our consideration as marking a radical change in our national policy.

2. The Domestic Exchange Situation before 1915

We have seen that the making of out-of-town settlements constitutes a complicated problem in a country like the United States, inasmuch as we have the combined difficulties

of a large area, a multiplicity of banking units and an extensive use of checks.

In earlier days, ordinary personal checks had little currency outside of the community in which the drawee bank was located. Firms in the business centers, as a rule, refused to accept the checks of out-of-town customers, demanding instead a postal or express money order or a draft on New York. Creditors who did accept personal checks expected the drawer to include a generous sum to cover collection expense. For not only did the collecting city bank expect to be reimbursed for the labor and expense of procuring a remittance from the drawee bank, but the latter would likewise exact a fee for the trouble involved in sending a draft in settlement of the claim. In spite of all of these handicaps, the use of checks in out-of-town payments continued to increase. Fewer and fewer firms were able to insist that a customer add a collection fee to the amount of his remittance, or undergo the expense of buying a draft. As a consequence, the creditor had to absorb the charge or, if the competitive situation permitted, pass it back to customers by concealing it in the price of the goods.

At first it was customary to send an out-of-town check directly to the bank on which it was drawn, but this involved writing and paying the postage on a remittance letter to each bank whose checks were involved. Since no agreement covering the matter existed, the collecting bank did not know what sort of deduction the drawee bank would make, especially if the two were not accustomed to dealing with each other. The uncertainty and expense connected with such an arrangement naturally fostered the establishment of banking interrelationships. Agreements were made by which banks exchanged out-of-town items without any remittance charge or, at least, one very materially reduced. The country banker established substantial balances with his city correspondents, sending miscellaneous arrays of out-of-town checks

for collection and credit to his account. He thus sought to avoid both the cost of numerous separate remittance letters and the heavy charge made by the remitting banks. The city correspondent likewise avoided these charges by sending the items belonging to a given region to a correspondent in that general neighborhood, although it was not uncommon for checks to be sent even in the opposite direction if a bank's convenience were better suited thereby. By this roundabout process checks eventually reached the drawee bank through some channel that precluded, if possible, its making a charge for paying the check or at least restricted the amount of the charge to a pre-arranged percentage.

The indirect routing of checks from one correspondent to another had both its advantages and disadvantages. Unquestionably it effected material savings in collection charges. Bankers were able to collect out-of-town items for customers at a more moderate cost, and, where competition was keen and no local clearing house association rule stood in the way, the bank itself absorbed the charge, crediting the customer with the full face value of the check. On the other hand, there were decided objections to the whole arrangement. In the first place, it fostered a fictitious and deceptive reserve structure. A country bank in Wisconsin, for example, would send an eastern check to its correspondent in Milwaukee and the amount would be immediately credited as a part of the country bank's lawful reserve, notwithstanding the fact that the proceeds would not be received for a number of days and the check might even prove to be worthless. The Milwaukee bank might send the same check to Chicago where its lawful reserve would be correspondingly increased. The Chicago bank could send it on to New York and, where the reserve laws permitted, would count the same uncollected personal check as part of its lawful reserve in New York. There was thus brought about an unwholesome pyramiding of reserves. Objection also arose with respect to the time consumed in

collecting checks by so circuitous a route. During the prolonged interval, either the customer or the bank had to be deprived of the use of the uncollected money. A third objection lay in the increasing danger that a check might become worthless as additional days were added to its homeward journey. A deposit which was entirely adequate to cover all outstanding checks four days after this particular item was drawn might easily become depleted before its belated arrival three days later. Fourth, while a number of banks joined the "par lists" of city bankers, thereby agreeing not to charge exchange when remitting for checks sent home to them by mail, the majority still considered such a charge a legitimate source of profit and insisted upon making it. This was shifted back from bank to bank and thence to the depositor who presented it for collection, thus adding to his cost of doing business.

Various plans for improving the situation had been put into operation during the period immediately preceding the World War. Several cities added country clearing departments to the city clearing house and demonstrated on a smaller scale the great saving in time and money to be derived from a clearing mechanism for out-of-town remittances. In addition, proposals were made from time to time looking toward a wider application of the clearing principle. Serious consideration was being given to the establishment of a clearing center in each state with a common clearing point for the exchange of interstate items. A proposed national clearing corporation was also the object of extended discussion. If the ideal facilities afforded by a regional banking system had not become available in 1914, undoubtedly some such device as this would eventually have been adopted.

3. The Federal Reserve Clearing and Collection System

As has been observed, the framers of the Federal Reserve Act in providing for a clearing and collection system, seized the two-fold opportunity of solving the problem of nation-wide check collection and providing a substantial reason for the continuous operation of the the several Reserve Banks. They empowered the Reserve Board not only to require the individual Reserve Banks to clear checks in their own districts but to establish, either in Washington or at one of the Reserve Banks, a nation-wide or inter-district clearing mechanism.

Much as the Board desired to see these provisions of the Act carried out, the situation demanded caution. In the first place, as we noted, various banks had built up rather elaborate par systems of their own and did not look with favor upon threatened destruction of this part of their business. Country member banks were still permitted to carry a part of their lawful reserves in city banks, and looked upon the forwarding of checks for collection and credit to their reserve accounts as an essential part of the arrangement. Furthermore, many of the smaller member banks regarded the par collection principle, established by the Reserve Act, as depriving them of a legitimate source of profit.

In keeping with the Federal Reserve Board's policy of caution, the Reserve Banks started their operations without provision for a clearing system. At an early date, however, the Kansas City and St. Louis Reserve Banks were permitted by the Board to set up intra-district systems and to compel all of their members to remit at par; but it was not until the middle of 1915 that a country-wide inter-district system was created. Even then the Board adopted a voluntary basis for participation in the plan, i.e., member banks need not agree to remit at par to their respective Reserve Banks if they did not choose to do so. It soon became evident that

nothing approaching universal par remittance would ever be possible unless compulsion were used.

Accordingly, in 1916, the present system was inaugurated under which all member banks must remit at par for all items sent them by their Reserve Banks. Members are still, however, not compelled to employ the facilities of the System in making their own collections. In 1917, as a part of our war legislation aimed at greater unity in the banking structure and a more efficient financial mechanism, the privilege of becoming a clearing member of the Reserve System was accorded all other banks in the United States. Provided they agree to remit at par for their checks when sent to them by their respective Federal Reserve Banks and to maintain a balance with the Reserve Bank sufficient to cover items in process of collection, they may make free use of the System's clearing and collection facilities. For reasons which we shall consider later, many members and most of the non-member banks have failed to avail themselves of this privilege. Since 1917, then, we have had a situation in which every bank is permitted, but none compelled, to avail itself of the Reserve System's clearing facilities.

With respect to the bank on which the out-of-town check is drawn, the Attorney-General of the United States ruled, early in the existence of the present collection system, that the Reserve Banks could not collect checks from banks which deducted an exchange charge. Since prohibition by the Reserve Act of this practice applied only to member banks, and only a mere handful of non-members had as yet agreed not to make such a charge, the scope of the system was decidedly limited. In fact, items drawn on a large majority of the then 29,000 commercial banks were at first ineligible for collection through Federal Reserve channels. In order to remove this serious barrier to the System's effectiveness, Federal Reserve Officials set about at once to secure agreements from the non-member banks whereby they would remit at par

to the Reserve Banks. The response was gratifying, some seven thousand non-member banks being placed upon the par list soon after the plan was inaugurated.

Our entry into the war gave further impetus to a campaign which had as its goal the placing of every bank in the country on the System's par list. By Armistice Day, 1918, 19,000 of our 29,000 commercial banks had accepted par remittance. In order to further the movement, the Reserve Banks in 1918 abolished all service charges. In addition, they removed the country banker's principal excuse for not entering the par list, viz., the monetary loss involved, by assuming every item of outlay attached to the process of remitting to a Reserve Bank. Stamped envelopes and printed remittance forms were provided at Federal Reserve expense, and all express, telegraph, and postal charges assumed. But the real reason for remaining outside of the par list still persisted. Country bankers were unwilling to forgo the profit they had made in excess of the actual expense involved. So long as some ten thousand banks persisted in this attitude, the effectiveness of the plan was greatly impaired, for bankers would not avail themselves of its facilities to the fullest extent when a goodly number of the items presented by customers were not collectible through Federal Reserve channels.

Although there is nothing in the Federal Reserve Act which could be interpreted as a mandate to the Reserve System to compel the extension of its par list, it was resolved to make a determined effort to place the names of the remaining ten thousand banks upon the list. By means of personal visits to banks, and appeals made in print and at bankers' conventions, such remarkable results were obtained that the Federal Reserve Bulletin for April, 1920, reported that scarcely more than two thousand banks still remained off the list. Not content with this excellent showing, Reserve officials in districts where recalcitrants still remained resorted

to sterner methods. Their checks were accepted for collection by the Federal Reserve Bank and were sent to some person or firm in the town, for presentation at the bank's window. Announcement was made that every bank was now considered as on the par list and that it could elect whether it would receive its checks from the Reserve Bank by mail or have them presented in person by some designated local agent of the Reserve System. The only means of retaliation available outside of resort to law was to annoy the agent by subjecting him to every sort of delay and inconvenience or by printing on checks a statement to the effect that they would not be paid if presented through a Reserve Bank.

Now that the damage has been done, it is rather generally conceded that the Reserve System went too far in its zeal to perfect its collection system. Bitter opposition sprang up, particularly in the Middle West and South, where most of the non-par banks were located. Member banks and other par list institutions joined with the rebellious bankers in their protest. Appeal was made to state legislatures and the courts for relief. Unfortunately for the Reserve System, the severe break in agricultural prices, which attended the crisis of 1920, came at the very height of the controversy over par collection, and severe criticism of the credit restriction policies of the System was added to the hostility engendered by its methods in the campaign for universal par remittance.

While the various statutes and court decisions bearing upon the controversy constitute an interesting commentary upon current legislative and judicial attitude toward banking problems, a detailed consideration of the contents of the various laws and decisions would scarcely be justified in a work of this type. Suffice it to say that the Supreme Court of the United States has affirmed the right of the Reserve System to operate a nation-wide clearing system upon a par remittance basis. The Court incidentally upheld the practice of the Reserve Banks in witholding credit from the account

of a clearing member until the proceeds of the checks it deposited had become available to the Reserve Bank. Even the practice of presenting a bank's out-of-town checks at its window was declared to be within the law, but a rebellious bank was accorded the privilege of paying with a draft instead of actual money. The Court, however, reminded the officials of the Reserve System that they had not been commanded in the Federal Reserve Act to force universal par collection upon unwilling non-member institutions.

As soon as they came to appreciate the extent of the harm done by their policy of forcing par remittance upon unwilling banks, the Federal Reserve officials reversed their policy. The names of banks which refused to remit at par through the ordinary channel of the mails were stricken from the list and checks drawn upon them are no longer accepted for collection by any Reserve Bank.

The par list has suffered further losses on account of the great number of failures following the post-war crisis and of withdrawals of country banks which had been swept into the list by the over-vigorous activity of the period immediately following the Armistice. Some of the withdrawals have been forced by state legislatures who compelled their state banks to make remittance charges on pain of losing their charters.

On January 1, 1929, 21,487 of 25,398 banks doing a commercial business were still on the par list. Of the 3911 banks not on the list, more than 2200 were in the South and over 1300 of the remainder in the Central West.

In spite of these heavy defections from the par list, and the failure of many members and non-members to employ the System's facilities, the Federal Reserve clearing and collection plan may be pronounced a decided success.

It has reduced materially both the scale of exchange charges and the size of the "float" or average volume of items in process of collection. When a business firm receives an

out-of-town check, it obtains the full amount, promptly; or if a collection charge is made by the collecting bank, it is materially less than the old rate, because of the greater speed of the Reserve System's plan and its freedom from the drawee bank's charges.

At present but twenty-five of the more than three hundred clearing houses in the United States compel their members to exact a charge for collecting out-of-town checks. Furthermore, the promptness and directness with which checks reach their destination greatly reduce losses due to shrinkage of a drawee's deposit to insufficient size or its withdrawal completely before the arrival of the check.

Quite aside from checks sent directly from one neighboring town to another, it is estimated that all but about ten per cent of the total volume of out-of-town remittances is collected through the Federal Reserve Banks. Many items, it is true, are first sent by a member or non-member to its city correspondent for deposit, and the latter completes the collection through the Federal Reserve collection system.

When so superior a mechanism has been developed one is led to inquire why some checks are still collected through the old channels. The following are some of the principal reasons:

First, as we saw in our discussion of the correspondent relationship, banks have ties of long standing and of great mutual benefit, generally. In many instances, they have continued to keep up the old relationship in its entirety, even though one particular element in it, like the collection of out-of-town items, might be taken care of more effectively through a new channel. Undoubtedly the interchange of items between correspondents does tend to strengthen the bond existing between them.

Furthermore, the whole series of relationships comprised in one bank's carrying a balance with another involves the frequent remittance of funds. As a country bank sells for-

eign and domestic exchange, from day to day, against its city balance, or instructs the city banker to lend or invest sums for it, the account tends to shrink below the level upon which the two banks have agreed as a minimum, and a remittance of out-of-town items is a convenient means of replenishing it.

The two per cent interest paid by the city correspondent on bankers' balances is in itself at times a sufficient inducement to attract a country bank's transit items in that direction.

Second, since the Federal Reserve has given up its efforts to collect the checks of nearly four thousand banks which refuse to remit at par, all of the twenty-five thousand commercial banks are compelled to resort to other channels when they have checks to collect on a non-par bank.

Third, the long-drawn-out par collection controversy and the Federal Reserve discount policy in 1920–21 have left their scars in certain sections of the country. Some bankers would undergo considerable inconvenience and additional expense rather than patronize the Reserve System.

Fourth, the Federal Reserve Banks adhere rigidly to a published collection time table. They will not give the collecting bank credit for a check until sufficient time has elapsed for the proceeds of the collection to have become available to the Reserve Bank. Competition among city correspondents, on the other hand, has led to a great deal of laxity in their practice. They frequently will make the full amount of a good-sized out-of-town check available immediately and will absorb the resulting loss of interest.

The maintenance by the Reserve Board of a gold settlement fund composed of deposits from each of twelve Reserve Banks not only has made possible the settlement of the daily inter-district balances arising out of the nation-wide clearing system, but has largely obviated the heavy shipments of money which characterized our old system of domestic ex-

change. In pre-Federal Reserve days, heavy seasonal fluctuations in transactions between the East and the West or the South caused the price of New York exchange in western or southern cities to go to a premium or a discount. If the scarcity or superabundance of drafts on New York persisted, the "agio" would soon reach the point at which it was profitable to ship currency, and a considerable movement would set in. Not only did the cost of transportation and insurance figure in the transaction, but large sums of interest were lost on this temporarily unproductive money. This procedure has all become a thing of the past. A San Francisco bank which desires to deposit two millions in cash in New York merely gives a memorandum to its local Reserve Bank which wires the Federal Reserve Bank of New York to place that amount to the credit of the New York bank. Any differences between the two Reserve Banks created by this transaction will be settled by mere entries in the books of the gold settlement fund. This service is available to member banks without cost and will be performed for other banks and the business public merely for the cost of a commercial telegram.

4. The Duties of the Reserve System to the Government

Alexander Hamilton was possessed of a clear conception of the advantages of a central bank organization to the state. In his "Report on a National Bank," presented December 13, 1790, he pointed out to the Congress that such an institution would render special financial assistance to the state in time of war or other great emergency, and facilitate the collection and disbursement of government funds, including interest on the public debt.

When the First Bank of the United States was established, the Treasury immediately placed a large part of its funds on deposit in the bank and its branches and, in lieu of paying interest, the bank performed the arduous task of collection

and disbursement of public money over an expanse of territory in which means of communication were crude and difficult.

The bank was forbidden to buy any United States stock. It already owned about six million dollars' worth which the government and private subscribers had employed in paying for their shares. Furthermore, it made substantial advances to the Treasury from time to time—in fact repayment of government borrowings was so slow as to constitute a heavy burden upon the bank's operations.

The decision of Congress not to recharter the First Bank of the United States resulted in a complete change in financial policy which started our government upon a radically different course from that pursued by other nations. It was not until a hundred years later that we readopted the plan of a close working relationship between a quasi-public bank organization and the Treasury. Since the government had not as yet provided its own facilities for handling public funds, Secretary Gallatin adopted the one remaining course, viz., that of turning the task over to state banks, which had increased from 88 in number to 208 in the three years following the expiration of the United States Bank's charter.

This growth naturally was fostered by the prospect of succeeding to some of the public business of the United States Bank. Even though careful discrimination was made in the selection of banks, the service rendered by them to the Treasury was distinctly disappointing. Their notes were not current outside of restricted areas and they lacked the banking interrelationships and other machinery necessary to effective collection and disbursement of funds. Suspension of specie payment and bank failures during the crisis attending the War of 1812 not only acted as a further handicap to satisfactory service, but constituted a menace to the safety of the government's deposits. The Treasury had to blunder through the trying period of the war with no central bank upon which

to rely for temporary advances or for aid in the distribution of its loans.

After such an experience, Congress was willing to relent, and gave its approval to the establishment of a Second Bank of the United States in 1816. It is a further commentary upon the deplorable results of the interim policy (1811–16) that the Treasury had to postpone transferring its funds to the new bank because of the fact that it was unable to obtain any considerable portion of them from the state banks, most of which had suspended specie payment.

The Treasury Department employed the facilities of the Second Bank so far as they were available, supplementing them with the use of state banks in places not served by an office of the Second Bank. Government deposits bore no interest and, since they constituted the major part of the bank's total deposits, were a chief source of earnings. In return the bank rendered gratuitously the customary banking services to the Treasury, and made heavy advances to the government. The bank, having incurred the bitter enmity of President Jackson, soon began to lose its public deposits and shortly was refused a new charter. In the period following the closing of the Second Bank, the history of the interim between the First and Second Banks repeated itself. There was a large increase in the number of state banks, the number reaching 713 in 1836; ninety-one of which were employed as United States depositaries. A panic also ensued, with a nation-wide suspension of specie payments and inability on the part of the United States to possess itself of its funds except in irredeemable paper money. The reliance upon so-called "pet" state banks had twice proved to be a failure, and yet the opposition to central banking was still too much alive even to permit serious consideration of the reestablishment of a United States bank. But one feasible plan remained, viz., the complete divorcement of the financial affairs of the government from banking institutions.

Because of the brief interposition of a Whig administration (1841–45), the final separation was not effected until 1846.

The establishment at that time of an independent treasury marked the beginning of a radical experiment in government finance, which persisted with few modifications until after the inauguration of the Federal Reserve System in 1914.

A chain of sub-treasuries was created whose officers were to keep in their possession all government funds entrusted to their care. The law especially enjoined them from "loaning, using, depositing in banks" any part of the money placed in their keeping. Since the collectors of public money were forbidden to accept paper money, the transfer of their accumulations to the nearest sub-treasury was attended with considerable difficulty.

With the rapid improvement in transportation and the substantial increase in national wealth and large surpluses of public funds, with no war to put a terrific strain upon it, the Independent Treasury system was able to give a relatively good account of itself during most of the pre-Civil War period, 1846–61. In the panic of 1857, the major disturbance of the period, we had one of the first of a number of striking exhibitions of a government treasury attempting to serve as the stabilizer of the money market in the absence of a central banking system. The Secretary of the Treasury bought United States securities in the open market, after the fashion of our present Reserve Banks, with the same object in view—to ease an acute stringency in the money market. As was the case, however, with similar action by the Reserve System in 1927, the additional supply of money merely served to fan the speculative flames.

Because of bad management rather than any fault of the Independent Treasury system, in the Buchanan administration a thoroughly bad financial situation developed. Accordingly, the Lincoln régime not only inherited a state of rebel-

lion but an empty public purse and a low national credit rating.

For the first time since the Treasury had divorced itself from the banking system, the shortcomings of the independent plan really manifested themselves. The government, with no money on hand to begin its military operations, was compelled to ally the Treasury with the state and private banks once more, by seeking short-term advances from them. But because of its refusal to take the loan in the form of bank notes, it denuded them of their gold and thereby was an important contributing factor in the general suspension of specie payments which followed.

The final blow to the principle of absolute separation of government finance and banking was dealt in 1863, when the present national banking system was inaugurated. As we have seen elsewhere in our discussion, the compelling reasons for starting a new banking system at such a seemingly inopportune time were the government's need of more adequate fiscal machinery, and of a broader market for its bonds. By basing the new system's note issue upon United States bonds as collateral and requiring a substantial deposit of bonds whether notes were issued or not, Congress expected that a decided stimulus would be given to a disappointing demand for the war-time security issues. The results did not fulfill expectations, but the new system justified its creation through the valuable aid given the Treasury in the collection and disbursement of the large sums required for carrying on the war. After the Civil War, the national banking system continued to supplement the Treasury's facilities in handling government business and was particularly helpful in the extensive refunding operations of the late 'seventies and the resumption of specie payments in 1879. It is doubtful if the Treasury alone could have brought either of these important matters to a successful conclusion.

Throughout its entire history the Independent Treasury system has had an undesirable effect upon business, for the heavy movements of currency into and out of the government's hands has seldom synchronized with the seasonal demands of business for currency. All too often large sums were flowing into the Treasury at the very time when crop moving or other seasonal monetary needs were the greatest. On the other hand, large Treasury disbursements frequently brought great amounts of money into the hands of the banks at a time when there was no legitimate means of employing it. In order to alleviate monetary stresses, various Secretaries of the Treasury have undertaken to perform a duty which normally belongs to a central or regional reserve banking organization, by placing large sums of money at the disposal of the bankers. In most instances the action of the Treasury brought badly needed assistance, but the results accomplished by arbitrary and artificial exercise of this function by a government official proved to be much less satisfactory than when it is performed as a regular part of the day-to-day operations of a quasi-public banking organization.

The selection of banks as public depositaries was based largely upon political considerations rather than upon superior capacity for serving the government. Moreover, the use of the facilities by a public Treasury has never been wholly satisfactory to either party. The Treasury subjects the banks to sudden withdrawals, frequently at times that are most inopportune for the bank and its customers. Otherwise, in the absence of a central or reserve banking system, the Treasury has to try to harmonize two unrelated financial problems—the transaction of its daily business of collecting and expending public revenues, and the distribution of such revenues according to the local currency needs of every section of the country. An effort of this sort requires the assumption of functions not within the legitimate scope of the portfolio of finance. While such assistance usually pro-

vides sufficient relief in normal times, it proves to be entirely inadequate in time of severe strain.

The existence of large surpluses in the Treasury, due to our inelastic sources of Federal revenue, was usually overcome by buying up some of the large Civil War debt still outstanding, but after 1900 the total amount remaining was largely tied up in the Treasury as security for the note issues of the national banks. In order then to put recurring Treasury surpluses back into circulation, many additional depositaries were designated throughout the country, some of which it was so inconvenient to use that they were merely given the use of a relatively small fixed sum and rated as "inactive." Here again the scarcity of available government bonds to serve as security for the deposits raised a serious obstacle which was promptly overcome by Secretary Shaw's ruling that government bonds "and other securities" meant "or other securities," and that municipal and railroad bonds should be accepted from bank depositaries along with the securities of the United States.

It was the intention of the group who were responsible for the drafting of the Federal Reserve Act that both the sub-treasuries and the system of pet bank depositaries should be abolished immediately, and the entire banking business of the government placed in the hands of the proposed Reserve Banks. Secretary McAdoo, however, opposed so sweeping a change and succeeded in having the employment of the Reserve Banks as fiscal agents left to the discretion of the Secretary of the Treasury. As a matter of fact, until 1916, the Secretary held that the Reserve Banks were not yet in a position to handle government business. Accordingly he continued to employ an average of some 1400 national banks to bear the brunt of handling public money. The sub-treasuries were still kept in operation but played only a minor rôle. In spite of the existence of the rediscount facilities of the Reserve System, Secretary McAdoo continued the

policy of depositing large sums with banks in sections where crop moving requirements produced a stringency. By 1916, however, the banks of these regions had learned to look to the Reserve System for such service and our long-standing policy of Treasury relief of money shortages came to an end.

Beginning with 1916, the Treasury began definitely to transfer to the Reserve Banks much of the business which had been transacted by national bank depositaries and the sub-treasuries, but the Secretary insisted that both be retained on the ground that they were rendering a service which Federal Reserve Banks alone could not perform satisfactorily. In spite of this view, a pronounced sentiment was developing in opposition to the further existence of sub-treasuries. This culminated in the Act of May 29, 1920, which ordered the discontinuance of all of the sub-treasuries, a task fully accomplished by February of the following year. The trust funds in gold and silver back of the several forms of government paper money were moved to the main Treasury and the mints and assay offices, while the task of exchanging and redeeming currency and coins for the banks and the public was transferred to the twelve Reserve Banks. The following figures give one a slight conception of the magnitude of the task taken over by the Reserve Banks from the sub-treasuries. For the year ending June 30, 1927, employees in the twelve banks received and counted 2,202,428,000 pieces of paper money, and 2,691,184,000 coins. They cashed 37 million United States bond coupons and issued, redeemed, or exchanged nearly eleven billion dollars' worth of government bonds and certificates of indebtedness. In all of the operations for the Treasury the existence of the gold settlement fund has been of inestimable benefit. At times during the war period a billion dollars a day in public collections and disbursements was handled without a strain upon the Reserve System's facilities. For some ninety per cent of this work the Reserve Banks receive no compensation, but this

is not a matter of great consequence, for the Banks are required to pay to the government all net earnings in excess of the six per cent dividend and a limited addition to surplus. In addition the Reserve Banks have become custodians of the surplus deposits sent to them by depositary banks and arising out of receipts from customs and internal revenue agents and the post offices. They have assumed also the care of the 5 per cent redemption fund back of national bank notes and the interest money paid the government by depositary banks. They are now under obligation to cash the checks and bond coupons of the Federal Government and to transfer the public money to any part of the country the United States Treasury designates.

With the declaration of war with Germany the fiscal duties of the twelve banks assumed gigantic proportions. Large additional space was required and an army of employees added. The distribution of temporary Liberty bonds, followed by the exchange of the permanent bonds for them, the cashing of coupons, the conversion of one loan into another, the distribution of the short term notes and certificates of the Treasury, all were performed much more efficiently and economically than was possible with the pre-war fiscal mechanism. The important part played by both national and state banks in government war finance was made possible only through the facilities and leadership of the Reserve Banks.

It has not been, however, with respect to its distribution of government securities alone that the Reserve System has rendered invaluable aid to the government. In order that bond issues running into billions could be absorbed, instalment buying plans had to be employed, the financing of which could be borne by the banks of the country only by generous use of the resources of the Reserve Banks.

Members borrowed from their Reserve Banks on government collateral, or, after rediscounting commercial paper,

used the additional credit for carrying partial payment bond purchases.

In addition, the Reserve System in establishing an open market for short term government borrowings has greatly facilitated their distribution. The twelve banks will take them from brokers and permit the latter to repurchase them within a fifteen-day period. In this way, they can always be bought and sold at the going rate. This assured outlet has encouraged many bankers to substitute government obligations for commercial paper as secondary reserve.

The Reserve System deliberately kept its rediscount rates below the point which the tense money conditions of the war period would ordinarily have dictated in order that the sale at par of government bonds and certificates of abnormally low yield might be expedited.

As we shall see, when we discuss our gold problem, there fell to the Reserve System the task of mobilizing as much as possible of the huge store of gold specie and certificates already in the country, together with the large imports of European gold which began to flow into our banks soon after the outbreak of the World War. Had we relied upon our pre-war combination of Treasury and depositary banks for this service of collecting an adequate basis for greatly increased credit extension, and protecting it thereafter from exportation, one can scarcely see how the enormous burden of war finance could have been carried.

After the government's business began to settle into more normal channels, new policies looking to a permanent fiscal set-up began to be promulgated. The number of general national bank depositaries has now been materially reduced and the amount of their deposits lessened. Instead of creating regular depositaries at the whim of a local Congressman or other office holder, it is the policy of the Treasury to maintain them only at places where there is no Reserve Bank or branch close at hand and where the government has a con-

siderable amount of business to transact. On June 30, 1928, but 300 of these remained, although it is necessary to recognize, in addition, as limited depositaries nearly 1000 banks which carry the balances of postmasters and officers of the Federal courts. The Federal Reserve System, in other words, is now regarded as the dominant unit in the depositary structure. Since the major portion of public disbursements is made through Reserve Banks, the larger part of the government balances must be deposited there.

Each quarter the huge Federal income tax payments paid by collectors into the Reserve Bank of their respective districts are joined with the excess of customs and other revenues over the fixed amounts the several national bank depositaries are permitted to retain. Since there is still a large amount of Treasury financing in anticipation of income tax payments, some 7500 banks have been designated as special depositaries in order to facilitate the distribution of the government's borrowings. The idea underlying the arrangement is that a bank or trust company by becoming designated a special depositary may retain all of the proceeds from the sale of its quota of government certificates until the Treasury needs the money. However, they must pay interest on these deposits at the rate of 2 per cent per annum. The existence of this system of special depositaries may be justified on the ground that the instant removal by the Treasury of the several hundreds of millions in proceeds from the sale of certificates of indebtedness would create a serious financial stringency.

Under the special depositary arrangement, the government withdrawals are spread over a period of several months, during which time the disbursed funds tend to find their way back into the communities from which they came. Through the Reserve Banks' close coöperation instant delivery of government securities is effected. A San Franciscan, for example, who places an order for government obligations in

New York can call upon the San Francisco Reserve Bank for the amount of securities he has purchased, the settlement being effected through the Reserve Banks of the two districts.

The reduction of the number of banking depositaries to the lowest limit consistent with good business has enabled the United States materially to reduce its average daily balance figures. Before the war a $100,000,000 average daily deposit was considered essential, while under the present system a very much larger volume of public business is handled with an average balance of some $36,000,000.

The obvious advantages of the new system, then, are that it has speeded up the public business and at the same time greatly reduced the outlay involved. By the employment of special depositaries to supplement the twelve Reserve Banks, it enables government financing to be done with a minimum of disturbance; the transfer of the government's working funds from the sub-treasuries to the banking system has relieved the Treasury of the obligation of undertaking to stabilize the money market and has placed this task where it belongs—in the keeping of the quasi-public banking organization.

In spite of the fact that the ownership and management of the twelve Reserve Banks is in private hands, except for the general supervision afforded by a public board, they are to a large degree instrumentalities of the government. Their exercise of public functions with respect to the stock of currency and the various aspects of state finance place upon them a serious public responsibility. While it is desirable that in normal circumstances they be given as free a hand as possible in the exercise of all of their functions, the safety of the structure of both public and private finance is so much in their keeping that the state could never afford to stand idly by, as it does in the case of private business ventures, and permit them to fail.

The Bank of England, in its long history, furnishes a

striking example of this policy. Under normal conditions the Bank functions as free from public regulation and interference as any other joint stock enterprise in England, but in time of war or other national crisis, without the sanction of law or the existence of specially constituted machinery, the Bank subordinates the interests of its owners to the welfare of the state.

The tendency in the formerly state-dominated central banks of Europe is toward greater freedom of management during normal times. The danger of political interference is thus minimized and independence and continuity of management are assured.

BIBLIOGRAPHICAL NOTE

All of the more general works on the Federal Reserve System previously listed contain valuable material on the check collection system and the services of the Reserve Banks to the Government.

W. E. Spahr, *The Clearing and Collection of Checks* (New York, 1926), is the only separate treatise on that subject. C. S. Tippetts gives a valuable account of the par clearance controversy in the *American Economic Review* for December, 1924. A similar article was published in the *Journal of Political Economy* in July, 1920, by H. H. Preston.

David Kinley, *The Independent Treasury,* published by the national Monetary Commission in 1910; and J. M. Chapman, *The Fiscal Functions of Federal Reserve Banks* (New York, 1923), are the chief volumes dealing with the relation of the banking system to the Treasury. President Kinley's work deals particularly with the period from 1846 to 1909. Professor Chapman's special interest is in the period since 1914, although he gives a very useful résumé of the Treasury's relations with banks since the establishment of the First Bank of the United States.

CHAPTER VIII

POLICIES RELATING TO THE GOLD STANDARD

1. The Nature of the Problem

It will be recalled that the monetary standard, or standard of value, of a country, is the quantity of some chosen commodity, usually a precious metal, which fixes the meaning of the official monetary unit. In the United States, for example, the gold dollar is our monetary unit, and the 25.8 grains of gold it contains constitute our monetary standard. The fact that all of our other forms of money and deposit currency are potentially convertible into the gold dollar causes them to circulate on a parity with it. The exchange value or purchasing power of both the gold dollar and these other media, however, is determined by the total quantity of all of them in circulation, the velocity at which each dollar circulates, and the total volume of transactions to be performed by money and credit media.

Even if we lost all of our gold coin, or suspended gold redemption, the other forms of currency need not necessarily lose any of their purchasing power. The reasons why a nation keeps a large stock of gold and offers to redeem other media of exchange in it are (1) that added confidence is inspired in the public mind by the existence of this option, and (2), that since there is only a limited stock of gold available for redemption purposes, a limit must thereby be placed upon all the other forms of currency.

Unfortunately, the suspension of the redemption privilege has generally accompanied the outbreak of a war, when vast quantities of money and deposit credit are always required at once. The act of suspension ends the control of the gold stock over the quantity of other forms of currency and permits a huge expansion to occur with a consequent shrinkage in purchasing power of each unit. Moreover, the loss of the pyschological support derived from the existence of the redemption privilege tends to shake public confidence in the inconvertible currency and to cause further losses in purchasing power to manifest themselves through a quickened velocity of circulation occasioned by the desire of the holders to get it off their hands as soon as possible.

We see, then, that where the redemption privilege is in operation, gold has both a valuable restraining and sustaining influence upon the other forms of money and credit. It should also be evident, however, that in spite of this beneficent influence, fluctuations in the purchasing power of our money—that is in the general level of prices—will occur whenever the total volume of money or the velocity with which it circulates increases or decreases faster than the amount of goods to be exchanged.

To put the case in another way, our present gold standard system has its merits and its defects. It provides a wholesome restraint upon currency inflation and yet does not insure stability in the level of prices.

Large outputs of new gold, new issues of money and bank credit, increases in the efficiency with which money and bank deposits function, all tend to lower the value of our dollar. On the other hand, failure of the volume of money to keep pace with the growth of trade will cause the value of the dollar to appreciate; that is, prices will fall. An ideal monetary system would provide us with a unit for measuring values which would be as unvarying as the official yard stick and the gallon measure kept in the United States Bureau of Stand-

ards. If such a system could be devised, a dollar would not buy a specified quantity of commodities and services in 1913, and seven-tenths as much in 1929. This problem of regulating the supply of money and credit so that a dollar will purchase the same quantity of commodities and services at all times is the first of three important questions of policy which relate themselves to our gold standard system.

The second problem, that of the enormous stock of gold which the fortunes of war placed in our hands, is now largely a matter of retrospect, and yet a consideration of the issues involved is essential to an understanding of American monetary and banking policy.

The third important question has to do with a predicted shortage in the world's gold supply and proposals for dealing with such a situation should it materialize.

2. The Inconstancy in Value of Our Present Dollar

Under our prevailing monetary systems, the general level of prices, which is a reflection of the purchasing power of the standard unit (the dollar in our case), is subject to several types of change. First, there is the long-time or secular trend like the swing which began in 1897 and was still in progress when the World War broke out in 1914. Second, there are the variations in the price level which usually accompany the several phases of the business cycle. Third, there are modifications in the price level arising from widespread changes in the demand for or supply of goods and services whose production and movement from producer to consumer are facilitated at every step by the employment of money and deposit currency.

The incidence of any of the changes in the value of our yardstick of value, the dollar, is not the same for all commodities or services. If it were, each person's real income would be the same as before, for any increase in the price

of things he had to buy would be offset by a like increase in his own income. Likewise, if no time ever elapsed between the receipt of money and its expenditure, or between the assumption of an obligation (such as a debt or other contract to pay sums of money in the future), and its discharge, a depreciation or appreciation in the value of the dollar would be of little consequence. However, a large part of the money we receive is not spent forthwith, but is laid by to meet future requirements, or loaned with the expectation of its subsequent repayment. Even though wages and salaries are paid in cash at specified periods, the amount is usually contracted for in advance, and any subsequent changes in purchasing power tend to benefit or injure the respective parties to the contract. In like manner, contracts to furnish equipment or materials are usually made for a stipulated sum, and for a considerable period in advance of delivery and payment. Here again, a change in the value of the dollar will deprive one of the two parties of some of the total purchasing power implied in the original bargain. A similar situation obtains in long-term debts. If *A* borrows $10,000 from *B*, payable in ten years, and the value of the dollar is increasing at an average rate of one per cent a year, *B* will receive the equivalent of $11,000 in purchasing power when his $10,000 is repaid. Meanwhile, the goods or services that *A* must dispose of in order to meet his obligation will have tended to fall ten per cent in price so that *A* will have to part with ten per cent more of his goods than were represented by $10,000 at the time the debt was incurred.

It can readily be seen that important social consequences can result from sudden and marked changes or even slower changes if they persist in a given direction. When the general level of prices is rising, an artificial stimulus is given to business activity. Entrepreneurs engage capital, materials, and labor at specified rates. To these contracted costs they add their percentage of profit in order to arrive at the

selling price of their product. If prices are rising, they will be able to obtain more than this normal selling price, and thus realize an unexpected gain. This will stimulate them to borrow more capital and to obtain more materials and equipment. Thus a period of prosperity, accompanied by complete utilization of physical plants and labor force, will tend to result. On the other hand, the cost of living will tend to increase with the increase in prices. The recipient of bond interest on the securities floated by the entrepreneur, the wage and salary workers and others who contract in advance for their incomes will be able to buy less with these incomes when they get them. Thus the standards of living of important groups in society will be threatened.

On the other hand, a period of falling prices, while seemingly beneficial to all recipients of fixed incomes, is apt to be trying if the decline is so marked as to force entrepreneurs to curtail their operations and thus employ less labor and borrowed capital. The difficulty in this situation lies in the fact that the entrepreneur, instead of securing the unanticipated gains of the rising price period, is incurring corresponding losses in the régime of declining prices as selling prices fall below his contracted costs, plus his normal rate of profit. Wages and salaries will buy more provided they remain at the former level, but if the entrepreneur's financial plight causes him to shut down his plant, operate on a reduced schedule, or cut salaries and wages, the lower cost of living will not be of much benefit to his employees.

A stable standard of value which would result in merely an unchanged general level of prices (though not, of course, in the prices of individual commodities), would greatly reduce these unearned gains and losses and help to stabilize business. On the other hand, the stimulus of a rising price level has undoubtedly quickened the ambitions and imaginations of business men, and should therefore be credited with some of the remarkable material progress we have made.

However, the gain resulting from greatly increased stability and certainty would, in the long run, probably more than compensate society for the absence of the artificial stimulation of rising prices.

Considering the effects upon economic groups in a little greater detail, we find, first, that the investor group as a whole gains when prices are falling and loses when they rise. From the standpoint of society in general, the losses of the investment class are not an unmitigated evil, for they tend to deliver the borrowing group from the grip of a leisure class which, because it has inherited great wealth, levies a large annual toll upon industrial activity. In Germany, and to some extent in other European countries during the World War, this class was impoverished by the extreme depreciation in the value of the legal tender currency. At the height of the inflation in Germany, for example, a debt of a trillion marks could be discharged by the payment of the equivalent of one gold mark (23.8 cents).

The so-called business group, although none of these groups can be segregated in water-tight compartments, profits the most by a depreciating standard of value. With its costs relatively fixed, the unexpected rise in selling prices brings increased profits. The feeling of "good times" prevails everywhere and the volume of sales increases accordingly. If a currency is losing value very fast, people spend it with great rapidity, for they do not want to run the risk of serious shrinkage in value while it is in their possession. Salaried persons, especially in government positions and in other employments where it is difficult to secure an upward revision in remuneration, soon find their incomes considerably behind the upward march of prices. Wage workers will be in the same position unless through strong union organization or a scarcity of labor of the type needed they can hold a whip over the employer and exact increases corresponding to the advance in living costs. One element in their favor in a régime

of rising prices is that employers are eager to expand their operations, a fact which sets up competition for additional labor and puts the working class in a stronger bargaining position.

When prices are falling, the worker who is fortunate enough to work full time, with no wage reduction, profits by his increase in real income; but if, as is usually the case, the fall in prices is accompanied by an industrial depression, he may find his weekly pay envelope cut off completely or its contents materially reduced. Employers become so obsessed with the fear of declining profits that they will curtail operations much farther than the actual price reduction warrants. Since the recovery from the acute depression of 1921, the general trend of prices has been slowly downward, but through marked increase in industrial efficiency and the introduction of wholesale economies of operation, business as a whole has been able to operate close to capacity without making reductions in wages. The severe restrictions upon immigration have done much to strengthen labor's position.

From an extreme low level in the 'nineties, world prices began to rise slowly but persistently until as early as 1914 all countries were confronted with the problem of the high cost of living. Farm products had increased in price at a faster rate than commodities in general. Wages and salaries had advanced somewhat, but not in proportion to the increase in the cost of living. By 1914, savings bank accumulations, life insurance policies, and investment securities had lost almost a fourth of their purchasing power in 1897. The gold monometallic monetary system had been universally recognized as the most satisfactory type of standard ever tried. During the twenty-year period preceding the war it had come to be employed by all of the outstanding countries. This fact, however, did not prevent all of their respective price levels from rising rather consistently, although the more widely gold is used as money the greater stability it has.

The rapid increase in the use of checking accounts added to the expansive powers of the banks of the United States, and the velocity of circulation of both checks and money increased with growth of cities and improvement in banking facilities. Gold itself, however, was equally responsible for the fact that our exchange media had expanded at a faster rate than the volume of business to be transacted by them. Rich discoveries of new gold deposits, together with improved methods of extracting and refining ore, added a huge new store upon which to build issues of money and deposits subject to check.

3. Problems Arising Out of Our Huge Gold Stock

With the outbreak of the World War, European nations found that the most expedient and quickest way to obtain huge sums of ready money was to remove the restraint entailed by the necessity of converting money and bank credit into gold. Accordingly, specie payment was immediately suspended and enormous sums in bank notes and deposits were advanced to the respective governments by their central banks. With this great addition to the medium of exchange, prices began to soar. In countries like England, even, where the most conservative financial policy is always followed, the price level reached a height three times that of pre-war days, while in Germany, Russia, and other countries, where no restraint was placed upon the post-war borrowings of a bankrupt nation, the issues of notes and the index of prices soared to figures not commonly used outside of the science of astronomy.

The United States, on the other hand, occupied a unique position. Since we were the source of supply of enormous quantities of food and war materials, and were able to ship little from the warring nations in return, an unprecedented trade balance in our favor involved the payment of large sums in gold to our bankers in addition to the proceeds of

the long-term credits advanced by American lenders. In 1917, when we ourselves entered the war, we did not find it necessary to abandon the gold standard as the other belligerents had done, but we did place decided limitations upon its natural workings. In the first place, the gold in bank tills and pocket circulation was mobilized in the Treasury and the Federal Reserve Banks, and a sentiment developed against its further use as circulation money. Gold scattered in the vaults of thirty thousand banks was moved into the Federal Reserve and acquired much greater reserve power when concentrated in a central banking structure. Gold certificates gave place to other forms of money in pocket circulation, and the people of the Pacific Coast, who had steadfastly maintained their opposition to the use of paper money since the days of the Civil War, gave up their gold pieces and reconciled themselves to paper substitutes.

In the second place, we placed an embargo upon gold exports. Our debtors were sending us large shipments of gold, but we permitted our money to go to a discount in certain neutral countries from whom we were buying heavily, rather than run the risk of an insufficient stock of gold to support the large credit structure the war might compel us to erect. After the signing of the Armistice we raised the embargo, and subsequently yielded some of our supply to our creditors, but the tide continued in our direction in spite of the large credits we granted to many countries.

Liberal gold credits, placed at the disposal of Germany, England, France, and some of the lesser nations by the Federal Reserve Bank of New York and private agencies in this country, have been of material aid in replacing them on a gold basis. They have balanced their budgets, ceased to borrow from the central bank for current expenses, and are holding their gold credits for use in supporting their respective monetary units in the foreign exchanges. For instance, France has recently stabilized the franc at 3.93 cents United

States money. If necessary, she will make use of her gold credit in the purchase of exchange in case an unfavorable balance of international transactions threatens materially to lower the quotation for the franc. None of the major European countries has returned unequivocally to the gold standard, but with their budgets balanced, and a gold credit established, together with substantial gold stocks of their own, they can protect the value of their unit in the foreign exchange market, and by refraining from credit inflation at home, can maintain what is virtually a gold exchange standard.

The United States with all of its accumulation of gold of more than four billion dollars, has by no means denuded the stocks of other nations. They have been adding to their central stores by way of the product of the mines and the combined process of coaxing and forcing gold out of pocket circulation, but all of them with the exception of France are experiencing a shortage of gold and a consequent tightness of credit.

In pre-war days the balance of exchange of goods and services between the United States and other countries was so nicely adjusted that dealings of many billions were settled by a relatively small volume of specie shipment. But our ability to supply so bountifully the materials needed by the warring countries started an inward flow of gold which resulted in a net increase of more than two billion dollars in our gold stock by the time it reached its height. These movements are undertaken not by governments, but by bankers who make a profit from shipping gold and drawing drafts against it when the exchange rate has gone far enough away from parity to cover the cost of the operation plus a profit. Our present reserve requirements for member banks are in the form of a book credit at a Federal Reserve Bank and not in specie; neither is the gold desired by patrons for use in pocket or till. It therefore finds its way to the Reserve Banks, where it is used by a member to discharge indebtedness, is placed to

the credit of the reserve deposit account, or is exchanged for Federal Reserve notes.

Unlike the Danes, who placed a ban upon further importation of gold after they had accumulated a satisfactory reserve in the central bank, Americans took rather an unwarranted pride in this overwhelming flood of gold. This unprecedented accumulation thrust upon the nation a very difficult problem in credit control, for it made possible the erection of a huge pyramid of credit upon it as a base. With the lower reserve rates prescribed by the Federal Reserve Act as amended, and our greatly augmented gold reserve, the possibilities of loan-deposit expansion were very great. We were thus enabled to provide a hitherto unheard-of volume of credit to the government, to war industries and to our allies. During the peak of war activity and the post-war boom which followed, our gold resources were utilized as a basis of credit expansion up to the legal limit. After the crisis of 1920, the continued receipt of new gold and the introduction of hand-to-mouth buying with its lessened demand for bank funds again created a condition of redundancy in the supply of gold. This happened in spite of our large foreign loans, an unprecedented increase in the volume of stock market loans by member banks, and the forcing back into circulation by the Treasury of over a billion dollars in gold certificates.

The very presence of this great accumulation of gold gave rise to a grave menace of inflation. It placed upon bankers and upon Federal Reserve officials the heavy responsibility of seeing that the expansion possibilities of the System were not put to the test. We shall consider this obligation more fully when we come to deal with the discount policy of the Federal Reserve System.

One must, however, credit certain developments in business management since 1920 for the lack of pressure in behalf of inflation. First of all, there has been relatively little demand for funds for plant extensions, inasmuch as the war

left most industries with buildings and equipment far in excess of their needs. Second, business men learned from their heavy losses on inventory in 1920 and 1921 to buy more often and in smaller quantities. Consequently they had less need for working capital in the form of bank and book credit. In this new policy they were aided by a decided speeding up of transportation, and by a relative stability in prices with the trend downward. Undoubtedly, also, the present generation of merchants and manufacturers, having experienced the ills of overexpansion in 1920, proceeded with caution so far as their own businesses went. They have given vent to any desire they may have to "plunge" by operating in the stock and real estate markets. The farmer, not having fully recovered from his last inflation orgy, has likewise been an influence on the side of caution.

It was urged in some quarters that we devise some means of getting rid of all of our gold in excess of our legitimate reserve needs, but we have been in the unfortunate position of being at one and the same time a creditor nation and one with a favorable trade balance. We sell more goods and services than we buy, and, in addition, have advanced many billions in credit to foreign governments and private business enterprises. Thus we set up a large flow of annual payments of interest and principal in this direction. Moreover, we erected tariff barriers which hindered our debtors in offsetting obligations to us with shipments of goods. All in all, conditions have not until recently been favorable to the exportation of any considerable amount of our gold. There is estimated to be some nine billions of gold in the world, of which we still have half.

Since 1927 the gold import situation has undergone a definite change. While high money rates on the stock exchange and payments arising out of the large obligations owed us by foreign borrowers have continued to draw gold in our direction, the steady inward movement of the preceding

thirteen years has definitely come to an end. Concurrently with a large increase in rediscounts at the Reserve Banks went a heavy outward movement of gold.

Loans for the stabilization of European monetary systems, together with the increased business which improved conditions fostered, were responsible for a net exportation (in 1927–28) of a half billion of dollars. Thus the world's gold supply is tending to redistribute itself in something like pre-war fashion.

Our abnormally large stock of gold has permitted us, with the facilities of the Federal Reserve System, to expand our credit structure to unheard-of size without imperilling our central gold reserves. We were enabled to carry on business on an unprecedented scale and at the same time to finance a veritable orgy of speculation in urban real estate followed by an even more spectacular performance in the stock market.

It is fairly evident, however, that our preferred position with respect to gold reserves is fast coming to an end. Gold production is declining, and economic conditions in other leading countries are steadily improving. Hereafter, instead of depending to a great extent upon the financial misfortunes of Europe, gold shipments will be made in response to changes in the normal balance of trade and investment. Instead of passively witnessing the steady inpouring of a gold supply into our coffers, we shall have to compete with the rest of the world for additions to our stock. With the increase in mining costs and the exhaustion of rich supplies, new deposits will probably be found with less frequency and older ones obtained from greater depths, with a corresponding increase in cost. The time is probably not far distant when we shall no longer be concerned with the problem of an excessive gold stock and shall be called upon to face the danger of a deficiency in our reserves.

Since the whole problem is one calling for the very closest

coöperation among the various nations, we cannot hope to reach a solution by independent action. The unhampered movement of gold from one money center to another is a *sine qua non* of healthy normal international business relationships. Such action as a downward revision by a nation of its prevailing notions as to what constitutes a safe reserve would probably be taken with entire safety and would be in keeping with sound international financial relations. On the other hand, the selfish impounding of gold by artificial restrictions or other methods calculated to impede its free movement would lead to reprisals on the part of other nations and would constitute an impediment to economic progress. Because of this international significance of the problem, we shall need to consider it further in connection with our discussion of the relations of our banking policy to that of other countries.

So far as circulation demands are concerned, gold will probably never again be used extensively as pocket money. The states of the Pacific Coast and the better-to-do foreign countries which before the war used gold coins for pocket circulation have become habituated to paper substitutes and are not at all likely to return to the old practice.

It has been proposed that an international gold settlement fund similar to that operated in connection with the clearing and transfer operations of the Federal Reserve System be established in a neutral country like Holland or Switzerland. In case the several nations concerned subsequently adopt the proposal of the Reparations Conference of 1929 that the international bank, created to facilitate reparations settlements, also accept gold deposits from all of the central banks of the world, by a mere transfer of ownership on its books, the bank could reduce to a small volume the present physical movement of gold between countries.

If we can eliminate the ever-present possibility of wars and

the seizure of such a gold store by a belligerent, a great improvement can be made in international settlements by the introduction of the clearing idea.

4. The Future of the Gold Standard

We have considered the nature of the major problems growing out of our adherence to the gold standard, viz., (1) the lack of constancy in value on the part of our dollar; (2) the strong temptation to inflation when gold reserves become redundant; and (3) the danger to our credit structure of such a deficiency in the gold stock as would impair confidence in the whole financial organization.

Many proposals have been made varying from mild stabilization measures to the complete abandonment of the gold standard. It will not be possible to examine them all. Two of the latter type of proposed solutions have so much merit and have attracted such wide attention as to warrant consideration in some detail. One of these, the so-called "managed currency" system, fathered by an English economist, J. M. Keynes, grew out of the situation in which Great Britain found itself after the close of the World War.

The Cunliffe Committee, appointed by the English government to study the currency situation and map out a course for the future, recommended that as soon as practicable the country restore the gold standard at the old level of $4.8665 in terms of American money. The irredeemable paper currency, which had fallen earlier in the war to less than two-thirds of its former value, expressed in terms of the dollar in the foreign exchanges, had finally been "pegged" at $4.76 until after the close of the war. When this artificial support made possible by loans obtained in America was removed, there was a temporary slump; but the pound began a natural recovery of its value in dollars. This gain in purchasing power, however, was being made at the expense of the farmer,

the industrialist, the merchant, and all debtors, including the government, who suffer from an appreciation in the value of money and the consequent fall in prices.

In order to check this impediment to a restoration of England's pre-war prosperity, Keynes proposed that the idea of returning to the gold standard be definitely abandoned and the currency be permanently stabilized at the existing level, which was then (1923) about ten per cent short of the old par of 4.8665. He contended that not only would the currency ills growing out of the war be remedied, but the age-old problem of the instability of a metallic standard would be solved.

The Keynes plan had two objectives: (1) the continued stability of the domestic price level in Great Britain, and (2) the elimination of the more or less temporary variations in the relationship between prices at home and in other countries.

In order to accomplish these aims, he proposed that the domestic supply of credit be made to conform as closely as possible with the variations in the volume of business. This was already being done fairly effectively since the war by the informal coöperation of the Treasury, the Bank of England, and the "Big Five" joint stock banks. Keynes' proposal was that it should be made a permanent substitute for the gold standard.

Instead of allowing the internal price level to wander up or down the scale as industrial progress or the state of gold production or some other uncontrollable factor dictated, Keynes would have had his regulatory body neutralize these influences which tend to disturb the *status quo*. The Bank of England would assume the lead, and the policies of the Treasury and the Big Five would be in harmony with whatever action it took. The volume of bank notes and deposit credit issued would be based upon the needs of business instead of the state of the national gold reserves.

Under this managed currency régime, gold would have ceased to circulate and the British mint would have abandoned its long-standing offer to buy, at £3:17:9 per ounce, all gold brought to it. There would still be need of a gold reserve for use in correcting a persistent unfavorable trade balance in the international exchanges, and in steadying the short-time fluctuations in the value of the pound sterling with relation to other currencies, but no attempt would be made to restore it to the old mint parity. All that the Bank of England would have undertaken in the matter was to set two limits—viz., its buying price and its selling price for gold—on the order of the upper and lower gold points in the pre-war exchanges. This would serve as a guaranty that fluctuations would keep within these narrow limits. If for any reason the unmanaged price level in other countries should take a marked trend downward, as was likely for some years after a great war, the Bank of England would have to take account of this discrepancy between the managed price level of England and the new level of world prices by fixing a new pair of buying and selling rates for gold from time to time.

Keynes has contended, and rightly, that the presence of huge gold reserves, even where the privilege of converting other forms of currency can be freely exercised, does not fully stabilize the purchasing power of money. The gold redemption privilege does serve as an effective preventive of such monetary orgies as took place in Europe during and after the war, but it did not prevent prices in gold standard America from more than doubling between 1914 and 1920, and, within the next year, receding more than twenty-five per cent. Paper money and bank checks do not need to be redeemed in gold in order to maintain their full purchasing power, so long as their volume is carefully restricted to the actual needs of business, and complete confidence is had in the wisdom and permanence of the regulatory device. Under a managed cur-

rency régime, if prices begin to rise, the banks will raise discount rates and withdraw funds from the open market by selling some of their investments. The government, also, will so order its debt payments and loan or refunding operations as to produce a stringency in the money market. The managed currency advocate interprets the cyclical variations in business as manifestations of excesses and deficiencies in the volume of currency, and consequently believes that if this volume can be kept constant, the ups and downs of business will be eliminated.

Even if a country found itself alone in its adoption of a managed currency system, Professor Keynes believes the benefits would greatly overweigh this disadvantage of a lack of internationality.

In spite of the strong case made by Keynes and the other advocates of managed currency against a return to the gold standard by Great Britain and the other nations which had suspended its operation in 1914, no country has had the courage to dissociate its currency system from gold. The business interests, as well as the rank and file of the general public, are afraid of artificial and arbitrary controls in the financial system. They fear the prospect that such control might get into the hands of a group who are selfish or misguided, even though they may be divorced from politics. Furthermore, with all due credit to the splendid progress economists and statisticians have made in the development of systems of price indexes and mechanisms for predicting the trends of business, our foresight is still far inferior to our hindsight. The business man and the plain citizen have not sufficient confidence in the reliability of forecasts to be willing to have them play an important rôle in our monetary system. As was just indicated in the example of correcting a difference in the price levels of two important countries, gold would still be needed for purposes of manipulation. Unless all important nations have the same standard, another

element of confusion and risk is added to all of the other perplexities of foreign commerce. Either London or New York, both of which have established themselves as international money markets, would face a rather complicated situation if their respective governments repudiated, as its monetary base, the metal which is recognized as the world-wide medium for settling international balances.

The other important substitute for the gold standard which deserves our careful consideration is sponsored by Professor Irving Fisher. He has put forth a "stabilized" or "compensated" dollar plan in which he would retain the gold dollar as a base for our credit pyramid, but would have its content adjusted in accordance with changes in the price level. He agrees with Keynes that the central bank should exercise restraint upon the volume of currency created, but he would not place the whole burden upon the banking system. His plan also embodies reliance upon the decisions of some sort of official board which would base the changes ordered in the content of the dollar upon the behavior of the index of prices. For instance, if the commodity price index indicated an increase of one per cent, he would have the mint ordered to embody one per cent more gold in the bullion content of our dollars. This would automatically make them one per cent more valuable, and thus serve to neutralize the one per cent increase in prices. In like manner, if prices moved downward, the weight of gold representing one dollar would be reduced correspondingly. It would be impracticable, of course, to keep calling in coins and recasting them; so Fisher would call in all of the gold coins permanently and substitute gold certificates for them. A certificate could continue to bear the same imprint, say $10 or $20, and call for varying amounts of gold bullion as the price level varied. In order to eliminate speculation in changes in the content of the dollar, he would provide a brassage charge of one per cent, and would limit the official board to a maximum change of one

per cent in any one month, no matter how much more the index showed the actual change to have been. In that case, a person who sought to exchange bullion for dollars, this month, and then exchange his dollars for a greater amount of bullion, next month, when the board had increased the content of the dollar, would make no profit out of his double transaction, for the mint would take all of his newly acquired extra bullion for brassage. In fact, if the board had ordered a change of less than one per cent, he would be out of pocket, for the mint would still exact one per cent from him.

Since the Fisher plan relies upon the commodity price index as the guide to corrective adjustments, it encounters the same objection which was cited in the discussion of managed currency. All of the recognized indexes show roughly the general trend, but none of them can be depended upon to indicate with precision the monthly changes of one per cent or less with which the Fisher plan proposes to concern itself. Since the month-to-month incomes of individuals do not move in close harmony with price changes, it is doubtful if such adjustments in the purchasing power of the dollar over short periods would work more substantial justice than now exists. Since, as we have seen, it is to the interest of the various economic groups for the purchasing power of money to vary in one direction or the other, there would be tremendous pressure brought to bear upon the party in power to appoint a board favorable to their particular inflationistic or deflationistic desires. Our success in divorcing politics from business in this country has not been so marked as to give us grounds for much optimism in this direction.

Correcting all changes in the price level by adjusting the grains of gold in the dollar would savor somewhat of attempts to reach all bodily ailments through the treatment of a single part. Gold coin would no longer be in existence, and gold certificates, if the present situation continued, would be found principally in the vaults of the Reserve Banks. Changes in

the purchasing power of gold certificates would undoubtedly reflect themselves in similar changes in the purchasing power of the entire stock of money and bank credit because of their convertibility into gold certificates. To this extent, altering the grains of gold back of a gold certificate is a simple and direct method of altering the purchasing power of all forms of exchange media. But not all changes in the value of money, or, in other words, the price level, have their origin in changes in the value of gold. The value of the whole mass of money and deposit currency is subject not only to changes in the condition of demand for and supply of gold, but to variations in the velocities of circulation of money and bank deposits, and to the amount of these two forms of currency outstanding. Even where no change has occurred in the amount of any of these factors on the money side of the equation of exchange, an increase or falling off in the amount of exchanges to be performed would alter the total value of money, i.e., the price level. Ideally speaking, therefore, where some other of the elements in the equation of exchange is obviously responsible for the change in the level of prices, adjustments should be made in it whenever possible. For example, if deposit currency were being increased by the banks faster than the increase in business needs seemed to warrant, the logical remedy would be to curb credit expansion instead of altering the size of the standard dollar. The same would be true of the only form of circulation money which is susceptible of any degree of contractility or expansibility, viz., the Federal Reserve note. The other factors influencing the price level would have to be counteracted by adjustments in the dollar or by restriction of deposits and note issue restriction. It is for this reason that Professor Fisher refuses to place the whole burden of correcting price changes upon the mint and believes that even under his plan the banking system would have an important responsibility in stabilizing the purchasing power of the dollar.

So far as immediate justice to consumers is concerned, the Fisher plan would not be efficacious. The Board would either have to make its changes after the consumer had already suffered from a change in the price level, or would have to make a more or less dependable forecast in advance and adjust the dollar in accordance with it. The percentage of error would be high. Miners bringing new gold in to the mints would feel changes immediately and directly, as would persons who came to the mint with certificates for conversion into gold bullion, but the rank and file of people would go on spending their money and bank accounts as usual, and the effect upon their purchasing power would be slow and indirect. The benefit to be derived, then, would not be immediate, but would manifest itself in the modification of the long-term or secular trend of prices. Even so, the makers and the recipients of long term payments form an important part of our economic organization, and neither of them should be robbed of their rightful dues through changes in the value of the standard of deferred payments. If, therefore, we could be assured as to the precision of our measuring or forecasting devices, and the impartiality and single-mindedness of a government board, there would be much to be said for trying the Fisher proposal, although here again the complications to our foreign commerce involved in the alteration of the content of the dollar, from time to time, loom as obstacles of no mean size.

The present temper of both America and Europe is opposed to securing relief by way of novel monetary plans, but Professors Keynes and Fisher have nevertheless rendered a distinguished service in arousing in the public mind a consciousness of the ills of an unstable price level and a desire that practicable remedies be devised.

All of the leading countries have now readopted the gold standard with such modifications as a still hazardous reserve position dictated. They are, for the present, contenting themselves with maintaining their domestic monetary unit at a

parity with the American dollar, or, as is the case in India, with the English pound. Gold is not in circulation nor can other forms of currency be converted into gold coins. The best one can do is to redeem his currency in gold bars or in exchange on a gold standard country.

The respective national budgets are balanced; hence the endless government borrowing, which was largely responsible for currency ills, has ceased, and the volume of money and credit is as carefully "managed" as it would be under the Keynes plan, except that the stabilization of the exchange rate with the United States or England, rather than the stability of the internal price level, is the guide.

A large part of the so-called gold reserves of the central banks of Europe consists (1) of deposits, "earmarked" or otherwise, in our Federal Reserve Banks or the Bank of England, and (2) of the bills of exchange or other easily liquidated short-term investment paper of financial centers like New York and London.

The present arrangements are generally regarded as temporary expedients rather than permanent currency reforms. The goal that all hope to realize as soon as possible is the complete restoration of the gold standard with resumed convertibility of other forms of currency into gold and the complete relaxation of restrictions upon its exportation. They are more thoroughly alive than ever to the shortcomings of the gold standard, but would rather experiment a while longer with milder remedies than the ones we have discussed.

5. Price Stabilization Measures Which Do Not Involve a New Monetary Standard

At the time when gold production was proceeding faster than the growth of trade could absorb the addition to the media of exchange which it occasioned, measures were proposed for an international control of the output of gold mines.

It was recognized that the steady world-wide increase in price level was largely due to this excess production of gold. Since the gold fields of the world are confined very largely to a few countries, it was argued that joint action in regulating annual outputs would be easy and effective. However that might have been, since 1915, when the peak of gold production was passed, there has been a marked change in the whole problem. Mining experts report that the workings in South Africa, which over a long period have produced more than half of the total annual output of the world, will continue to suffer a marked decline in production. A similar situation exists in other important gold fields, the only outstanding exception being those of northern Canada. Unless some very rich discoveries are made or marked economies brought about in the use of gold, the problem will resolve itself into one of stimulating gold production rather than curbing it.

Any attempt to check a régime of falling prices by offering a bonus for additions to the gold supply would, however, be wise only in so far as it stimulated the discovery of devices for the profitable utilization of a lower grade of ore than is at present commercially practicable. If the payment of a bonus merely hastened the exhaustion of our rich and more accessible mines, it would prove to be a boomerang.

So far as the present downward secular trend is concerned, the most feasible corrective seems to be the conservation and more economical utilization of the world's existing stock through the close coöperation of the central banks.

As for the changes in price level which accompany the respective phases of the business cycle, the application of correctives can best be left to the central banking organization. The principles involved in the exercise of this function and the experience of our own Federal Reserve System with respect to the whole problem of stabilization will form the theme of the next chapter.

BIBLIOGRAPHICAL NOTE

Irving Fisher, *Purchasing Power of Money* (New York, 1911, Revised in 1922); W. T. Foster and Wadill Catchings, *Money* (Boston, 1923); J. M. Keynes, *Monetary Reform* (New York, 1924); B. Nogaro, *Modern Monetary Systems* (London, 1927), and L. D. Edie, *Money, Bank Credit and Prices* (New York, 1928), all present clearly and effectively the problem of the inconstancy in the value of money. Professor Fisher has supplemented his earlier book with *Stabilizing the Dollar* (New York, 1920), and *The Money Illusion* (New York, 1928).

F. A. Bradford, *Money* (New York, 1928), and L. D. Edie, *op. cit.*, give excellent presentations of the subject of price level control, while J. S. Lawrence, *Stabilization of Prices* (New York, 1928); and F. Mlynarski, *Gold and Central Banks* (New York, 1929), are valuable special studies dealing with this same problem.

CHAPTER IX

CENTRAL BANKING POLICY AND THE STABILIZATION PROBLEM

1. Credit Control a New Concept in American Banking

THUS FAR in this discussion, our conception of the Federal Reserve system has been that of a great reservoir whose existence assures the business world that an adequate flow of money and credit will be forthcoming at all times. Properly equipped reservoirs, however, are provided with adequate control devices in order that the rate of flow may be varied with changes in the users' actual requirements. In this way, a condition of excessive flow at one time and of deficiency at another can be avoided.

When Congress set up the Reserve System, even though specific provision for price stabilization was stricken from the bill at the last moment, the public assumed from the start that the flow of credit from the Reserve Banks would be controlled in harmony with the interests of stability in business.

This attitude is especially worthy of note, inasmuch as the whole concept of responsible and systematic control of credit is entirely new on this side of the Atlantic. In fact, the central banks of Europe can scarcely be said to have developed a conscious policy of stabilization. The control which they have exercised over credit expansion and contraction has been more or less a by-product of their function of guarding against deficiencies in the gold reserve.

Like ourselves, the Canadians have never exercised a for-

mal control over the flow of gold. The fact, however, that there are but ten banks in the Dominion and that they work closely together has made possible somewhat more coöperation in such matters than we could hope to secure with our pre-Federal Reserve organization.

The lack of conscious programs of credit control on both sides of the Atlantic has probably been due to the fact that secular and cyclical changes in prices, the relation of the volume of money and credit to the price level and the measurement of price changes are problems upon which little progress had been made until the early part of the present century.

In times past, it is true, there has been a suggestion of the idea of responsible control of credit. For example, the practice of the two Banks of the United States in sending the notes of state banks home frequently, with a view to curbing excessive and irresponsible currency issues, savors of stabilization. Moreover, certain secretaries of the Treasury and informal groups of bankers and clearing house associations have aided in restoring stability through placing emergency funds on the market, although the dominant purpose in these cases was to relieve an acute shortage of funds, rather than to correct the price level or enforce a credit policy.

The Federal Reserve System used its resources so little before the entrance of the United States into the World War that its relation to credit control received slight attention. Not until the probable consequences of the unchecked inflation of 1917–19 came to be realized was serious consideration given to utilizing Federal Reserve policy as an instrument of stabilization. In spite of the none too happy outcome of the System's first efforts at control in 1919 and 1920, the public grew to expect the Federal Reserve authorities to see that the credit structure was kept on an even keel.

In 1922, after the System was freed from the necessity of placing the desires of the Treasury ahead of the needs of the

business situation, the Federal Reserve Board formulated a comprehensive discount policy and accepted, definitely, the stabilizing function.

In the sections which follow we shall first examine four fundamental factors in a discount policy and then review our brief experience at policy making. These factors in their order of treatment are (1) the objectives of a discount policy; (2) the guides to be followed in its determination; (3) the proper relationship between central bank and money market rates; and (4) the devices for making a discount policy effective.

2. The Objectives of a Discount Policy

The credit policy of the banking system cannot, of itself, eliminate all of the various kinds of changes which make for economic instability. Changes in the supply of credit are not the sole cause of changes in the price level. Likewise, changes in the price level are not the sole cause of economic instability. In fact, the latter is sometimes the cause of the former, rather than its effect.

Such being the case, it is futile to attempt to secure complete economic stability solely through a stabilization of the dollar or by any other single device calculated to eliminate or neutralize fluctuations in the purchasing power of money. It is also futile to expect to stabilize the purchasing power of money solely by influencing the supply of credit. The most a central bank can hope to accomplish in its discount policy is to exert a steadying influence upon the credit situation. To the extent that a change in the credit situation affects the general price level, the Reserve System's stabilizing influence will be passed on to the purchasing power of the dollar. In like manner, through the influence which the latter has upon a condition of general business stability, the

beneficent effect of a wisely conceived central credit policy will contribute to that much desired end.

When business is only moderately active, the banks and other money market institutions provide for the credit needs of business from their own resources. At such times, the discount and open market operations of the Federal Reserve System will be reduced to a minimum. This likewise reduces to a minimum the Reserve System's power to control the credit situation but, fortunately, at such times no restraint is needed.

When business needs encouragement, after a period of dullness, the Reserve Banks by a lowering of rates and heavier purchases on the open market should work in the direction of easy money conditions as an aid to economic revival.

On the other hand, when business firms are showing unmistakable evidence of over-extending themselves, and speculative fever is rife, there is need of Federal Reserve action in checking further expansion by increasing rediscount rates and "sopping up" money from the open market by selling Reserve Bank holdings of government securities. This constitutes the theoretical basis upon which the System has acted since the inception of its policy of credit control in 1923. As has been indicated, it is more direct and specific than that of any central bank in Europe, where credit control is an incident of the function of protecting the national gold reserve.

Our banking structure with its thousands of independent banks, and twelve quasi-central banks instead of one, naturally cannot carry out the objectives of a credit control policy as simply and directly as it can be done in one of the European countries with a single central bank and a few large branch commercial banking enterprises.

Each Reserve Bank has its own administrative officers and is transacting business in its own locality. It is therefore much more concerned with the credit needs of its own region

than with uniform national or international control. The other eleven banks are disposed to leave such matters to the Federal Reserve Board and the Federal Reserve Bank of New York, which from their respective positions must take a broad view of credit problems. Reserve Bank officials, as a rule, having been taken from posts in commercial banks, bring to their positions the viewpoint of profit making. Therefore, they are concerned lest the bank fail to earn its current expenses and dividends. The Reserve Board, on the other hand, does not engage in banking operations but devotes itself to harmonizing sectional policies and welding them into a unified whole. Its goal is the public welfare. Consequently, there must prevail within the Reserve System constant reconciliation of the regional and profit-earning conception with the national, and even international, point of view.

3. Guides to the Determination of Discount Rates to Be Enforced

One of the most widely recognized guides to the determination of the discount rates which a given situation calls for has been the ratio of gold to the notes and deposits of the central bank. Under pre-war conditions, a decline in a central bank's reserve ratio was the signal for a tightening of credit facilities, and vice versa. As we noted, however, when we considered America's gold problem in the preceding chapter, the war and its aftermath placed inordinately large stores of gold in our central reserves, at the very time when we were going over to the greatly liberalized reserve requirements prescribed for member banks by the Reserve Act. As a result, we have approximately quadrupled the size of our gold reserve since 1914, and, in addition, doubled the amount of credit which can be created upon a given dollar of reserve.

Fortunately, as we have seen, the experiences of 1920 led

business men to adopt more economical methods of purchasing and production, with the result that a record volume of business was carried on with a relatively small amount of credit. This is strikingly illustrated by our experience in the industrial peak of 1923. The credit pyramid could lawfully have been expanded to twice the size actually reached, and prices boosted to a level far in excess of that which characterized the period of inflation ending in 1920. However, the spirit of caution and credit conservation was so widespread that the abrupt upward movement in business activity stopped at the point where our industrial facilities were fully utilized, and did not, as in 1919–20, degenerate into a period characterized by a growing volume of credit and stationary volume of business. What expansion there has been within the past four years (1925–29) has been largely associated with speculation, first in real estate and later in stocks. In spite, then, of the recognition by the law of thirty-five and forty per cent, respectively, as safe minima for Reserve Bank deposits and Federal Reserve notes, our huge stock of gold has caused these two ratios to average about twice the legal minimum for the System as a whole. Such a situation lessens the sensitiveness of the central bank reserve ratio as a guide to discount policy. If the actual ratio were close to the legal minimum, a change of even one or two per cent would be significant, and could properly serve as a partial basis for a revision of the discount rates of the respective Reserve Banks. A ratio of seventy per cent or more, on the other hand, can undergo changes of several per cent without seeming to call for a program of liberalization or restraint.

Since the war we have at times been subjected to losses of gold of considerable size. But, as we have seen, the net movement over the whole period was in the direction of the United States, so that, until 1927, gold exports, which in pre-war days might have served as a significant guide to changes in discount policy, formed so small a part of our total stock

as not to prompt restrictive measures in the way of stiffer discount rates.

Even when the reserve ratio of the System shrinks to a point where it again becomes a sensitive indicator of monetary stringency or ease, it alone should not be the sole guide to Federal Reserve discount policy. Credit policy involves so many and such complicated human factors that expression of arithmetical relationship cannot be followed too slavishly. Surely, the state of our gold reserves should be taken into account; so should the index of prices, and so also should the index of production. In addition, however, numerous factors which cannot be reduced to a basis of statistical treatment should be considered. It is true that statistical measures like those mentioned are capable, to a considerable extent, of revealing the mood of the business community; but business, at any given time, is in a quite definite frame of mind, the nature of which statistical data do not fully and promptly reveal. If, for example, as has frequently happened in the past, business seems to be obsessed with a spirit of over-optimism, which tends to manifest itself in extravagant future commitments, a prompt stiffening of money rates might prove to be the stitch in time which would save the nine stitches needed after this over-optimism had expressed itself in the form of inflation of credit and prices. But this optimism does not express itself statistically. From their very nature, index numbers of prices and of production volume will always be of more dependability in recording historical data than in prognosticating future events.

The problem of the proper policy for the Reserve System to follow at a given time is not one of volume alone. The Act commits the System to a careful discrimination between the various types of credit needs. It instructs the Board and the twelve banks to supply through the member banks to the fullest extent the short-time needs growing out of the production and marketing of our agricultural and industrial out-

put, but it specifically forbids the rediscounting of loans for financing speculation or for fixed capital requirements. Nothing can hinder a member bank, however, from utilizing the proceeds of such loans from the Federal Reserve Banks as a basis for financing speculators and investors.

It is within the power of a Reserve Bank to refuse further accommodations to a member on the ground that it is not making proper use of an existing grant of Reserve Bank credit. Recently, in order to check the inpouring of bank funds into the stock market, some of the Reserve Banks have threatened to deny further credit to members who were using the proceeds of such grants for brokers' loans. It is doubtful, however, if the threat has proved effective in any appreciable degree.

If the officials of the Federal Reserve System, therefore, merely take into account the quantity of rediscounts, without reference to the relative amounts of members' loans which are made to each class of borrowers, they are neglectful of their duty. They are enjoined to see to it that "commerce and business" are being adequately accommodated, even if on occasion the legal reserve minimum has to be overstepped temporarily.

So far, then, as discount rates are concerned, the Federal Reserve System cannot now, nor in the future, base changes of rates solely upon the state of the gold reserves. It must ascertain from every trustworthy source up-to-the-minute indications as to the temper of the business community, and encourage or restrain in the interest of stability of prices and business conditions.

4. Relation Between Central Bank Rates and Other Money Rates

No discount policy, no matter how precisely determined, is of practical value unless it relates itself in some vital way to

the rates being paid by borrowers to the banks and other institutions of the money market. In England, the Bank of England has developed a very definite relationship between its operations under its official "bank rate," and the business which it and the other banks of London do at so-called "market rates." The Bank of England is a Dr. Jekyll and Mr. Hyde, in that it not only serves as the official "big brother" to the money market in times of stringency; on which occasions it applies the "bank rate," but it also carries on a regular commercial banking business with private customers in direct competition with other banks at the regular money "market rates." The bank rate applies only to bankers' acceptances and is uniformly higher than the market rate for this type of paper. The bank rate does not fix the market rate on the various types of paper. It may be said rather to express the judgment of the officials of the Bank as to prevailing conditions in the money market as evidenced by current market rates. The large joint stock banks which have the accounts of most English borrowers do not rediscount directly at the Bank of England as our member banks do. When they are "loaned up"—to use one of their current expressions—they send the bill broker and the discount house whom they would normally care for fully themselves, to the Bank of England, with all bankers' bills they offer in excess of what the joint stock banks are able to discount. The Bank applies its higher or official bank rate to these borrowers. If the demands for this accommodation, on the one hand, or losses of gold from adverse foreign exchange rates on the other, reduce the Bank's reserve ratio materially, it will not only raise the official bank rate as high as is necessary to protect the national gold reserve in its keeping, but it will compel the money market to raise its rates in proportion. In the latter case it enforces its will by selling interest-bearing bills on the open market, thus creating a stringency and forcing an increase of rates. Conversely, the Bank will at times

enter the money market in behalf of easier money, and, on such occasions, will invest cash in interest-bearing bills, thus adding to the supply of funds and lowering the prevailing rates to a point which more truly represents current money market conditions. The Bank of England is fairly small, so far as its regular clientele is concerned, especially when compared with the mammoth banks which have resulted from the consolidations of which we spoke in an earlier chapter. However, the English bankers voluntarily carry reserve deposits with the Bank of England, and the royal exchequer delegates the custody of its funds and the conduct of its fiscal operations to the Bank. These two sources, together with the funds of its own private clientele, provide the Bank with sufficient resources to enable it to accept its share of responsibility for the stability of the English monetary and credit structure.

The philosophy underlying the discount policy of the Bank of England may be summed up in the following statements:

1. It is the business of the Bank to safeguard the basis of credit, by checking undue exports of gold and expansion of loans. Raising the bank rate will normally turn the tide of gold back to England and will also check unnecessary borrowing.

2. The Bank rate is an emergency rate, and should be higher than the prevailing market rate for the same class of paper. The Bank rate does not become effective unless there is a stringency in the money market. The higher or penalty rate is necessary to discourage undue borrowing.

3. It is the Bank's policy, however, to grant to these emergency borrowers all of the funds to which they are entitled. Its practice in such cases is in marked contrast with our prewar periods of stress, when embarrassed but otherwise thoroughly sound firms failed because we had no source of emergency credit available at any price.

This rather detailed consideration has been given to the

English situation because there the relationship between central bank and money market has evolved out of generations of experience. Our Federal Reserve System was hampered by the war from giving adequate thought to the problem. It was not until 1922 that the Board formulated the beginnings of a discount policy. We have much to learn from the English experience, and yet our whole situation differs materially from theirs. First, we have a more complicated rate structure, with twelve central banks, and some twenty-seven thousand other banking institutions, together with the other money lending facilities of our financial market. Second, when an English borrower obtains a line of credit at his bank, no negotiable credit instrument like the American business firm's promissory note arises from the transaction, for he will merely use his credit by drawing checks and creating a series of over-drafts. Third, much is said in favor of our Federal Reserve banks "following the English practice" of keeping the bank rate higher than the market rate. The fact is that advances to English business firms are consistently higher than the official bank rate just as is the case in the United States. Our "bank rate" applies to the rediscounted promissory notes of business men. Fourth, we have sufficient difference in conditions in the various Federal Reserve districts to warrant a difference in rate policy in different regions. Even though the Board may feel that the rate policy in a given district should be modified, the phraseology of the Reserve Act does not give the Board specific power to initiate a different rate, but merely the power to pass upon changes made by the respective banks. In 1927, when the Board undertook actually to initiate a rate in the Chicago district, the officials of the Chicago Federal Reserve Bank challenged the right of the Board to take such action. Unless Congress or the United States Courts remedy this situation by vesting the rate-fixing power definitely in the hands of the Board, a uniform central discount policy for the United States will

be out of the question. The Board can allow for the natural differences in rates which may prevail as between two districts like New England and Texas without any interference with the formulation and enforcement of a homogeneous nation-wide policy. However, if each of the twelve boards of directors formulates its own policy independently, we should have to despair of any progress in the direction of systematic credit control.

Like the Bank of England, the Federal Reserve does not dictate the rates charged by banks and commercial paper houses. It must resort to indirect methods of enforcing its will regarding money market conditions. Whereas the English bank, when its reserve has fallen to the minimum consistent with sound banking, sends the dealers in bills to the Bank of England and thus brings the Bank's official rate into play, in the United States the banker himself goes to the Reserve Bank, secures additional cash or enlargement of his reserve deposit, and takes care of the additional demands of his customers himself. Some two-thirds of our banks do not belong to the Federal Reserve System and many of those who do, make little use of its facilities. Consequently, when a Reserve Bank changes a discount rate, it affects directly only those member banks who happen to be borrowing at the time. The enforcing of restrictions upon credit expansion by way of changes in the Federal Reserve discount rates, therefore, is a much more indirect and uncertain process with us than it is in England.

From our study of the effect of an increase in reserve deposits upon ability to increase loans, we found that if the member bank alone were expanding its loans, on the basis of an addition to its Federal Reserve bank deposit, it could expand little more than the amount of the increase in reserve, for if it undertook to do more than this it would be faced with large adverse clearing balances, as customers' checks got into

the hands of other banks. In such cases, the bank would feel compelled to pass on to its customers rate increases which the Federal Reserve Bank imposed upon it. For example, if a bank could lend with impunity, say $8000 on the strength of having added $7000 to its reserve through the sale of a customer's note of $7100, an increased rediscount rate on the note would cut into the bank's margin of profit unless it passed on the increase to the borrowers of the $8000. On the other hand, if there were a general credit expansion in progress, the same banker could lend close to the $100,000 limit on the basis of his $7000 increase in reserve, for he would probably be able to offset the checks presented for payment with a like amount of the checks of other banks which have fallen into his hands. The bearing of this discussion upon the problem of the relation of Federal Reserve rates to member banks' rates is this, that in the first of the two cases the action of the Reserve Bank would be felt by the bank and its customers. In the second instance, the bank is earning so large a profit by dint of having borrowed $7000 from the Reserve Bank that its earnings will not be seriously disturbed by even a considerable increase in the rediscount rate.

Ordinarily, then, changes in the rediscount rate affect directly only a minority of even the member banks, and have no appreciable effect upon their rate policy if the banks generally are expanding their loans to the same degree. Changes in the rediscount rate, however, do have a sentimental or indirect effect. The mathematical effect of a half per cent change in rates may be nil, except to borrowers who are on the outer margin; but the sentimental effect, especially in a highly tense or strained situation, can be far-reaching. In such cases, even banks having no connection with the Federal Reserve System are influenced in their credit policy by the announcement that the officials of the Federal Reserve System, in the interest of curbing further expansion, have put

higher rates into effect. This attitude will be transmitted to bank borrowers, and business and financial operations will be influenced by it.

5. Devices for Enforcing a Discount Policy

We have seen that moderate changes in the rediscount rate are not likely to be widely effective, unless the money market is in a strained position, where it is extremely sensitive to any unfavorable move, and where a considerable number of borrowers are so "near the edge" that an increase of even half of one per cent will be keenly felt. Central banks, then, ordinarily need to supplement the enforcement machinery of rate changes with other weapons. The most effective device of this sort was referred to in connection with our discussion of the Bank of England and its relation to the money market. We found that it enforces a higher rate by selling bills on the open market, and a lower rate by buying them. The framers of the Federal Reserve Act created a similar procedure for our Reserve Banks. At first, they exercised this privilege of buying and selling government securities, municipal obligations, and bankers' acceptances, each bank for itself, with the three-fold object of supplementing earnings, building up a domestic discount market, and fostering the use of the bankers' acceptance.

The Reserve Banks with their heavy operating expense, and a quasi-compulsion to pay the six per cent dividend upon their stock, find great difficulty in securing adequate income in times when there is little rediscounting. Furthermore, as we have already noted, their officials have almost invariably had their training in ordinary commercial banks where profit-making was the *raison d'être*. It is but natural that there should have been a disposition to engage in open market operations with a view to securing earnings, regardless sometimes

of whether the operations in question had a beneficial or deleterious effect upon general monetary conditions.

Within the last five or six years, the twelve banks have ceased to operate independently, in the open market, and have entrusted this phase of their activities to a joint committee with headquarters in New York. The committee has subordinated the idea of earnings to that of the effect upon monetary conditions which Federal Reserve officials desire to see brought about. By selling government paper when bank credit tends to become over-extended, and buying it when liberalization seems desirable, the Reserve Banks can exert an influence toward keeping the credit situation on an even keel. We shall see when we review the System's credit policies to what extent this method has been employed.

Central banks, especially in Continental Europe, have sometimes resorted to moral suasion in order to secure the general adoption of the particular credit policy which conditions seemed to dictate. In the United States with its large number of banks, scattered over an area of more than three million square miles, and most of these institutions unaffiliated with the Reserve System, it is impossible for a Board to employ this method effectively, since close personal contact is essential to its success. During the strained situation of the winter of 1919–20, members of the Board established temporary headquarters in New York, and with some success sought to exert a restraining influence upon the greatly over-extended situation. When banks are prospering and business is making large profits, appeals and warnings from a government board are apt to fall upon deaf ears. It is only when a nation is engaged in a great war or is facing some other crisis of like proportion that moral suasion seems to be widely effective.

Conceivably, credit rationing could be made effective in enforcing a policy of restraint, if some feasible plan could be devised to induce the banks to take it seriously. Our very

limited experience with it was not satisfactory. The Board during the war repeatedly called upon bankers to withhold accommodations from non-essential activities and to confine their loans to projects essential to winning the war, but its exhortations were largely unheeded. If they had been heeded, the serious problem of credit control in 1919–20 would not have developed. There is considerable merit in the recent efforts of the Reserve Banks to "separate the sheep from the goats" with respect to their credit standing. A file for each member bank, filled with comprehensive and intimate data regarding its lending and borrowing practices, is of great value in determining whether the quantity of its future requests for credit would be consistent with the System's credit policy. The Reserve Banks are not required to rediscount even the best of paper for a member unless, to quote Section 4 of the Reserve Act, they are "such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks."

The direct and sentimental effect of changes in the discount rate, supplemented by well-timed open market operations, seems to be the mainstay of the Federal Reserve System in its efforts to promote stabilization. Its leadership, then, in the nature of the case, cannot be so effective as that of the Bank of England, but the public has not yet reached the point in the development of its ideas on central banking where it wants aggressive action by the Board.

6. The Evolution of Federal Reserve Discount Policy

Now that we have seen what the objectives of a discount policy are and the possible devices by which it can be made effective, we are ready to survey briefly the Federal Reserve System's record in developing the concept of credit control and the attempts which have been made to apply it.

For the twenty-five years preceding the passage of the

Reserve Act, constructive thought had been given to the reform of our system of currency and banking. What loomed large in the eyes of the reformers, however, was the stabilization of economic conditions by way of restraints upon over-expansion, but the provision of adequate supplies of money and credit when crises and other lesser periods of financial strain were at hand. As is to be expected, then, the expansion features of Federal Reserve machinery occupy a major position in the Act, and have received general approbation, while a provision calling definitely for the stabilization of the price level was stricken out before final passage of the measure.

The World War, with all of its terrific cost in lives and treasure, was not without its blessings, for it crowded into months constructive developments which normally would have required many years for their fruition. One of these blessings is the progress we made in laying the foundation for a discount policy.

Before the United States entered the war, currency conditions were so abnormal as to render inoperative any credit policy which the Reserve Board might have seen fit to formulate. Business was recovering from a mild depression, but there was as yet no indication of undue expansion. Heavy purchases by European belligerents, with greatly diminished imports from them, had set in motion a heavy flow of gold into our banks. The Federal Reserve Act had automatically increased the lending power of the national banks by some four hundred millions, the day the Act became operative, by virtue of the radical reduction in reserve requirements. Moreover, even these new requirements were revised downward radically within the first three years that the System was in operation. It was not until the late fall of 1916 that banks had sufficient need of rediscount facilities to make the Federal Reserve Board and banks important factors in the credit situation. Up to this time, therefore, any discount

policy evolved would have been a paper one. The credit situation needed no restraint as yet, nor had a technique been developed for dealing with the problem.

After the United States entered the war, it became evident that the needs and desires of the Treasury would dominate every phase of Federal Reserve activity. Ample means were now at hand for developing a discount policy, for the banks were beginning to make free use of the rediscount privilege. Open market operations were also multiplying at a rapid rate. However, it soon became evident that matters of credit policy would be settled pretty largely with reference to their relation to the financial operations of the government. When the time arrived for vigorous action by the Reserve System in behalf of restraint, the Treasury department insisted that money be kept "easy," in order that huge issues of Liberty Bonds and certificates of indebtedness, bearing abnormally low rates, could be marketed at par. The justification of such a policy was that the public was being saved a huge amount of interest. It is obvious, however, that the saving has been wiped out, probably several times over, by the tremendous loss from uncurbed inflation, followed by a violent reaction in 1920. Even after the Armistice was signed, the necessity of raising further billions for ourselves and our allies dictated a continuance of easy money conditions, in the face of the greatest orgy of inflation in our history. As the government lessened its demands upon the money market, the public gave freer vent to its speculative propensities, and borrowed heavily in order to take advantage of the rare opportunities for profit afforded by the rise in prices.

It must not be thought that the Reserve Board took an entirely passive or spineless attitude toward this dangerous situation. From time to time, warnings were issued to the banks and the public, but the Board itself characterized these statements as "only a transitory expedient and given only momentary attention by many banks." The Treasury depart-

ment coöperated to the extent of withdrawing deposits from banks which were lending heavily to stock speculators. In November, 1919, the New York Reserve Bank raised its rates as a check upon the heavy rediscounting of its members. Banks were urged to grant loans for essential purposes only, to discourage speculation, and to advocate the postponement of all non-essential public and private improvements. An effort was made to create sentiment against further resort to rediscounting and in favor of reduction of indebtedness, but with little effect.

By the close of 1919, and the beginning of 1920, the System had become definitely free from the influence of government financing, and began to make amends for the delay in curbing inflation. General increases were made in discount rates, at that time, followed by further advances in the early summer of 1920. The Board had now set out definitely to check further expansion of bank credit. Because of the fact that there were great differences in the amounts of Reserve Bank credit being used by member banks, it was thought that mere increases in the rate would penalize banks whose customers used the additional accommodation for legitimate purposes. Many member banks, moreover, had not made excessive use of the rediscount privilege, while others were borrowing amounts several times their capital and surplus, and, if they could get more, would not be deterred by an advance in the discount rate, for they were for the most part heavily involved in speculation in land and commodities. In order to try to meet this problem, Congress was prevailed upon to pass the Phelan Act, which permitted a Reserve Bank to establish a basic line of credit for every member bank in its district, together with a progressive schedule of discount rates which was to serve as a penalty for borrowing in excess of the basic line. Four of the smaller Reserve Banks, Atlanta, Dallas, Kansas City, and St. Louis, tried the plan in an effort to curb the borrowings of certain banks automat-

ically, and thus avoid the issue of seeming arbitrarily to deny them further accommodation. Undoubtedly, the progressive rates accomplished their purpose in checking the excessive demands of a small group of banks, but this accomplishment was offset by cases of injustice done to others which were making an honest effort to see their clientele through the trying winter of 1920–21. After a short trial, the progressive rate schedules were abandoned and a refund was made to any banker who had been compelled to pay his Federal Reserve Bank more than twelve per cent interest. One case came to light in which the bank had been charged a rediscount rate of eighty-seven and a half per cent. The Phelan Act was repealed by Congress in 1923; hence if such a situation as existed in 1920–21 arises again, the Reserve Banks will have to face over-extended member banks with a courageous "No," instead of attempting to frighten them away with a rapidly increasing scale of charges.

The most effective effort at price control we have had was instituted entirely outside of banking circles. It was the control exercised by the various war boards over the prices and consumption of certain commodities which came under their respective jurisdictions. The Federal Reserve System did contribute heavily to the victorious conclusion of the World War, but its policies were so completely subordinated to those of the Treasury that it was unable to exercise a much-needed restraint upon inflation when such restraint would have been effective. Not only was it inhibited from the development of a sound and permanent discount policy, but its prestige suffered a setback from which it has been very difficult to recover.

The crisis of 1920 was followed by a period of radical deflation and a tardy effort on the part of the Reserve Banks to put a stop to credit excesses and still salvage as much as they could for the country banker and the farmer. This laudable effort, however, brought to the Reserve officials not

the good will but the resentment of the agricultural sections of the Middle West and South, and, for a time, threatened to bring the whole System to an end when the Reserve Banks' charters expired in 1933. Active hostility has since subsided and the charters have already been renewed for an indefinite period, but the farming sections of the United States will not be convinced that Federal Reserve policy in 1920–21 was not the cause of their financial undoing.

In view of the fact that the restrictive measures taken by the System at that time were the first serious attempt ever made in the United States at vigorous enforcement of a central discount policy, it is worth our while to examine the situation with some care. During the period of "easy money" expansion immediately preceding 1920, the farmer, like everyone else, over-extended his credit, and used the proceeds for the purchase of costly equipment and for speculation in land. The bankers continued their generous accommodations, and in fact, fostered increased borrowing in many instances, so that when the crisis came they were not in a position to help their customers to weather it. Some of the Federal Reserve Banks, which were expected to be never-failing sources of aid in time of trouble, became so over-extended in trying to save the situation that their reserve ratios almost reached the vanishing point. Fortunately, the Reserve Banks in the non-agricultural regions recovered quite promptly from their strained position and were able, through the inter-district discounting provision of the Reserve Act, to come to the assistance of the Reserve Banks in the agricultural sections.

It had not been the intention of the Federal Reserve officials, when they attacked the inflation situation in 1920, to restore or even to approximate the pre-war price level. They were concerned to enforce the legal reserve ratios and to put a stop to the alarming increase in questionable rediscounts. They had no clearly defined plan of attack or definitely or-

ganized machinery for executing it. There was simply an agreement upon the part of Reserve officials that the inflation had been permitted to go beyond the bounds of reason. Shortly after the System had launched on its policy of high rates and denial of accommodation to over-loaned borrowers in 1920, prices of various staple products began to collapse, and farm products, particularly, did not stop until they had reached pre-war levels or even below. Since this disaster followed so closely upon the heels of the System's policy of restraint, the two were promptly linked together as cause and effect. A closer investigation shows, however, that the restrictions applied by the Reserve Banks were but a minor element in the whole situation. They seem at worst to have been the match which kindled a highly inflammable structure. The production of food materials had been greatly over-expanded with such slogans as "Food will win the War," and the unheard-of prices stimulated the farmer to larger and larger undertakings. Our generous extension of credit to buyers in Europe and South America had sustained the market after the war demand had fallen off. But when credits began to be withheld from our foreign customers because of bad conditions abroad, exports fell off sharply and the crisis of 1920 was upon the farmer. Unfortunately for him, his volume of production that year was very large, and a bad situation in transportation interfered seriously with the orderly marketing of products. It was, therefore, not the curtailment of credit so much as it was the termination of an abnormal demand in the face of an unusually large supply, that caused the collapse of prices, although the unwillingness or inability of the banking system to carry over-extended farmers any longer probably did help to depress farm prices further than if their storage could have been financed until firmer prices obtained.

The close of the inflation period found the volume of credit in agricultural sections considerably more extended

than in industrial regions, but the restrictive action of the Federal Reserve System did not apply to or affect agricultural loans any more than it did any other type. After the Federal Reserve had put its policy of restriction into action, the rediscounts of the eastern Reserve Banks decreased, but those of the middle western and southern districts increased considerably; in fact, in some of the districts the peak of Reserve Bank loans and discounts was not reached until the fall of 1921.

The tightening of credit could not have been a vital element in the price recession, for (*a*) the rates of the Reserve System, even when they were increased, were below those of country banks, during the whole of 1920, and (*b*) the peak of prices was reached in May and June of that year, but the peak of loans and discounts for the whole banking system was not attained until October and in some of the agricultural districts not until well into 1921. In 1919, several months before the Board inaugurated its policy of restraint, hides, hogs, cattle, mutton, and butter had already reached their respective peaks and had started on a marked decline. For the year ending May, 1921, while Federal Reserve accommodations to industrial regions fell off 28½ per cent, rediscounts in agricultural sections rose 56 per cent. True, some banks were denied further aid by the Federal Reserve, but they had already borrowed ten to fifteen times their basic line of credit. During the first ten months of 1920, Reserve Banks in agricultural regions increased their loans by more than a half billion of dollars, and their note issues by 460 millions. During the same period, eight hundred leading member banks in these districts increased their loans to their customers to the extent of nearly two billion dollars. In the Minneapolis district alone, the amount of farm paper held by the Reserve Bank increased eight hundred per cent, from January, 1920, to January, 1921. As we have already indicated, the action of the Reserve Banks in raising the redis-

count rates and in denying further credit to certain banks did contribute to the further fall in prices by forcing farmers to market their crops and liquidate their borrowings. That this effort was not of prime consequence, however, is shown by the fact that a huge volume of frozen credit persisted for several years thereafter. In fact, large amounts of it are still in the hands of receivers of banks which failed because of their inability to "thaw" their frozen farm paper.

Had the Federal Reserve exercised no restraint in 1920, there would have been set in motion a chain of factors fraught with disaster. Not only would the banking system have been loaded with an intolerable burden, but the combined reserves of the whole structure might easily have shrunk to so low a point as to engender a loss of faith on the part of the public, and a nation-wide rush to convert deposits into gold.

Thus we see that the first vigorous attempt made by the Federal Reserve System to exercise control over credit did have an important psychological effect, at least, in a tense and over-strained situation. It brought disfavor to the whole system, but as we get farther away from the event such criticism as is made will be directed at the tardiness with which the effort was made, and not at the fact that inflation was checked.

Thus far, the Federal Reserve authorities had relied largely upon changes in the rediscount rates for the enforcement of their discount policy. Beginning with 1922 and continuing well into 1928, a noteworthy change was made. An active open market policy was adopted and discount rate adjustments were made subservient to it as an instrument of credit stabilization.

The period following the collapse of 1920 was one of acute depression. Large reserves accumulated in the Reserve Banks of the East during this phase of the cycle. Such business as there was, was very dull and the merchant and manufacturer

were conducting it with a minimum of borrowing. The Reserve Banks in the farming areas were trying to save country banks, and to liquidate as much as possible of the large volume of frozen farm paper in their own portfolios. Agriculture continued to be depressed, and in fact has not yet recovered the full measure of well-being it enjoyed in the years before the war.

The Reserve System desired to lead the way to better times by making the credit situation as favorable as possible. It was hopeless to attempt to achieve satisfactory results at this time by manipulation of rediscount rates. The whole business of rediscounting had been so overdone during the boom period that it had fallen more or less into disrepute. There seemed to be little disposition on the part of member banks, therefore, to join with the Federal Reserve in a concerted effort to bring about a revival in this way. Accordingly the System, in 1922, began to resort to open market operations as a means of business stimulation.

Its efforts were greatly aided by the acute shortages in certain industries, notably building construction and railway materials. Urban industry was soon making a rapid recovery. In fact, the revival made such headway that in the spring of 1923 a typical business boom seemed to be in progress. A rise in prices had begun and all that was needed to carry industry to another peak of inflation was a generous outpouring of bank credit and its employment by borrowers in extending their operations. Fortunately the experiences of 1920–21 were still too vivid. Bankers, economists, and public officials joined in a warning which proved effective. By May, 1923, there was a definite slowing down in business activity. The Reserve System had its part in the stabilization movement, using its open market operations in behalf of credit restraint. So far as employing the rediscount rate-change as an instrument of restraint is concerned, fewer changes were made in 1923 than in any year since the System

was organized. What changes there were, however, were made in harmony with the open market policy.

Thus we see that by 1923 the Reserve System had abandoned its earlier conception of the open market operation as a means of fostering the use of bank acceptances and of supplementing the banks' earnings, and had made of it the major instrument of credit stabilization. It proceeded to substitute for the open market operations of the individual banks the joint open market committee of Reserve Bank officers to which reference has been made. Purchases of securities in the open market are made by the committee for all twelve banks with due regard for their effect upon the credit situation. During the marked business activity of the early months of 1923, the Reserve Banks absorbed funds from the money market by selling more than four hundred million dollars' worth of United States securities. Conversely, during the latter half of 1923, when a mild reaction threatened to reduce business activity to less than normal, the banks purchased government securities freely, thus exerting an influence on behalf of easier money. The withdrawal of funds from the market through the sale by the Reserve Banks of obligations of the United States meant a drain upon the cash resources of the banks, for they and their depositors are the purchasers of the securities offered by the open market committee of the twelve banks. This impairs the reserve position of the member banks concerned, resulting frequently in their having to resort to rediscounting. Thus we see the close relationship that necessarily exists between the discount and the open market policies of the System. Conversely, when the Reserve Banks are buying securities, the member banks thereby acquire claims against them which they can use in cancelling obligations to the Reserve Banks or as a basis for further credit extension. This makes for easier money conditions.

With the inauguration of its open market policy, the committee was able, by well-timed buying and selling, to neutralize to a large extent the disturbances caused by the security redemption and income tax collection operations of the Federal Treasury, which in times past have been the bugaboo of the money market. In like manner, the effect of gold exports and imports of magnitude has been largely offset.

The Federal Reserve has been making zealous efforts to know what the credit situation is and to govern the character of the open market transactions and size of discount rates accordingly. In ascertaining the state of credit at any given time, the Reserve Board does not rely upon statistical evidence alone, but supplements it with expressions of opinion by business and financial leaders in various parts of the country. With respect to the former or quantitative evidence, a commendable degree of efficiency has been developed. The member banks of New York City are required to submit special statements as to the proportion of their funds employed for various purposes. Some six or seven hundred member banks from all parts of the United States submit weekly statements covering the important items in their balance sheets. Daily changes in the Reserve Banks' accommodations are available, as well as copies of bank examiners' reports on the loans and investments of member banks. Domestic and foreign business developments are studied with special reference to the trend of interest rates and commodity prices. It is seldom, however, that all of this evidence indicates the same conclusion; hence the Board has the task of weighing the whole mass of conflicting data and attempting to formulate a course of action from it.

With a definite procedure established and its objectives clearly defined, the Reserve System officials seemed to have in their possession a well-oiled stabilization mechanism. All they needed to do was to adjust their open market operations

and rediscount rates, and restraint or encouragement would result, as the case might be. Thus a state of continuous credit stability would be achieved.

Unfortunately, developments since 1924 have thrown the proverbial monkey wrench into the well-oiled machinery of stabilization. In a thoroughly commendable attempt at international financial coöperation, our Reserve Banks persisted in a policy of low rediscount rates, when the domestic situation began to warrant a stiffening in rates. If we had acted independently and increased our rates European money centers would have lost gold to this market, for they were maintaining a condition of "easy money," in order to stimulate business and to retain the accumulations of gold needed for their programs of monetary reconstruction. As a result of our artificially low level of money rates, an impetus was given to a major upward swing in stock prices and we soon found ourselves with a new domestic credit problem of staggering proportions.

At first, the Reserve System took no action to check the unprecedented flow of funds into the stock market; but when, in the face of a heavy outward movement of gold, this inflation continued, an attempt was made in the winter and spring of 1927–28 to restrain it. First, the Reserve System merely refrained from replacing the exported gold by the process of purchasing government bonds on the open market —a practice it had followed up to that time; later it changed from this negative procedure to the actual sale of government bonds and the raising of discount rates.

The situation all along has been so complicated, however, that a vigorous policy of restraint has not seemed expedient. Europe still needed the coöperation of the American money market if her stock of specie was to be protected from a heavy drain. Then too, high money rates on this side would largely defeat their purpose by inviting into our stock exchanges a flood of new money both from abroad and from domestic

sources beyond bank control. Worst of all, so-called legitimate business, which was not expanding unduly and therefore could not justly be the target for drastic repressive measures by the Reserve System, would suffer equally with speculation if radical changes were made in discount rates and open market policy.

There is no effective way in which the Reserve System can strike a blow at excessive brokers' loans without dealing a like blow at business. Under our present legislation, a Reserve Bank cannot place its taboo upon one group of borrowers at a member bank, as opposed to the others. It cannot even restrict the amount or proportion of funds a member shall lend to stock brokers or any other class of customer. As we have noted, the threat has not been effective to cut off the rediscounts of banks which proposed to use the proceeds in "street loans."

The reconciliation of a domestic discount policy with one arising out of the friendly coöperation between central banks of all nations is not easy, but it should be little more difficult than that of harmonizing in a single national discount policy the diverse credit situations of the several Reserve districts. The Federal Reserve System has mastered the technique of this latter task; so there is hope that the difficulties of the former may also be met.

As for the other even more troublesome problem—that of curbing credit excesses in lines over which the Reserve System has no direct control—little can be accomplished without a considerable addition to the powers of the Reserve Banks over the loans and investments of member banks. Even then the height of stock prices or the total amount of money loaned on the exchanges should not be the concern of the central banking organization. Only where it is clear that industry, commerce and agriculture are being subjected to higher interest charges because of a disproportionate flow into speculative uses would interference with the loan and investment policy

of a member bank be justified. Even in that case, a policy so out of line with our *laissez-faire* banking traditions would have to be followed with extreme caution and restraint.

BIBLIOGRAPHICAL NOTE

The general references given in Chapter V all deal more or less fully with the relation of central banking and stabilization. For a more intensive treatment the works of Bechkhart and Spalding, listed in Chapter VI, and those of Edie and Lawrence to which reference was made in Chapter VIII, should be consulted.

Government documents of unusual value are to be had. First there is *The Report on European Currency and Finance* compiled by J. P. Young and published by the Commission of Gold and Silver Inquiry, United States Senate, in 1925. Second, *The Stabilization Hearings* of the House Committee on Banking and Currency, 69th Congress, 1st session (1926), and 70th Congress, 1st Session (1928), are available as public documents.

For further knowledge of the English situation one should consult R. H. I. Palgrave, *The Bank Rate and the Money Market* (New York, 1903); D. H. Robertson, *Banking Policy and the Price Level* (Westminster, 1926); R. G. Hawtrey, *Monetary Reconstruction* (New York and London, 1926), and J. R. Bellerby, *Monetary Stability* (London, 1925).

CHAPTER X

POLICIES RELATING TO OUR CIRCULATION MONEY

1. General Background of the Problem

The American monetary system, like that of most other countries, is a patchwork consisting of several distinct groups of moneys. First, there is the group whose constituent elements all meet the test of monetary science in adequate fashion. Here we should place our standard gold coin, subsidiary silver, and Federal Reserve notes. There is a second group whose members came into being to supply what seemed to be an urgent need at the time of their creation, although even then they did not conform entirely to sound monetary principles. In this category should be listed the greenback and the national bank note. The present silver dollar belongs in a class by itself. There was neither fiscal nor financial principle back of its re-introduction during the period following 1878. It served merely as a sop to a group which was clamoring for the restoration of bi-metallism.

None of these forms of money is any longer particularly harmful to our economic well-being; hence active agitation for the elimination of one or more of the list has largely subsided, and any troubles they may have caused in the past now seem mere matters of history. Occasions are arising at irregular intervals, however, when it must be decided whether one or another of our several forms of money shall be discontinued. For example, in 1918, when we sold a large part

of our silver dollars to England, we were confronted with the question of the desirability of restoring them after the World War would be over. In 1930, most of the bonds back of our national bank currency are callable, and we shall be faced with the problem of retiring this form of money or of providing for its indefinite continuance. It goes almost without saying that some insight into the purpose for which it was created, as well as its behavior under various conditions, is essential to an adequate understanding of its present status and to sound planning with respect to its future. No matter how innocuous all of our forms of money may have become, questions of their perpetuation should not be settled on the purely negative basis of their innocuousness. If we are faced with the problem of continuance or retirement, the matter should be settled on positive grounds. Is a particular type of money performing an essential form of monetary service more acceptably than any other form of currency could do it? Would its discontinuance impose a hardship or a strain upon our monetary system? The mere fact that a form of money was the "dollar of our daddies" or that it has not been a menace to our monetary structure for twenty years, while it may be counted as evidence in the defendant's behalf, does not make a strong case.

Up to the time of the adoption of Alexander Hamilton's banking and currency program in 1791, our money had consisted largely of the coins of other nations, particularly those of Spain, together with the issues of paper money authorized by individual colonies or the Continental Congress.

As we saw in Chapter I, the system proposed by Hamilton recognized the predominance of Spanish coin in our circulation by selecting the dollar as our standard unit. His whole program embodied the best ideas of his time. In fact, with the exception of the bimetallic standard, his combination of standard money, small change, and the elastic note issues of

a quasi-public bank is recognized today as the best arrangement obtainable.

Hamilton would have a great deal of difficulty in recognizing his currency system today, with its jumble of good, bad, and indifferent alterations. First of all, we abolished the United States Banks with their own sound note issues and their wholesome influence over the issues of the state banks, thereby placing the country at the mercy of state bank issues of every degree of soundness. Second, although we demonetized silver in going to a gold basis, we have the unwieldy and troublesome "standard" silver dollars of the old bimetallic days to plague us. Third, we ridded ourselves eventually of a varied assortment of state bank issues which had begun to put in an appearance even in Hamilton's day. However, in so doing we substituted a highly inelastic national bank currency which still persists long after the reasons for its creation have vanished. A fourth change, and one for the worse, was the issue of legal tender notes by the government in 1862, despite a tradition established over a period of seventy-five years, opposed to putting the Treasury into the business of circulating paper currency. These notes, known as greenbacks, are still unpaid after sixty-five years. Lastly, we have made amends for the loss of the elastic notes of the two Banks of the United States by creating the Reserve Banks with their scientifically constructed note issue, and have stabilized our whole structure of money and credit by resting it definitely upon gold as a foundation. The only real net progress we have made, however, has been in the adoption of a more workable monetary standard than Hamilton's bimetallic system.

In the sections which follow we shall consider gold, silver, national bank notes, and greenbacks in some detail. Sufficient of their history will be introduced to enable us to have a better understanding of their origin, the functions they

were intended to perform, and the problems which their presence in the scheme of circulation moneys has created. Although the Federal Reserve note has become the money most extensively used, from the standpoint of circulation per capita, the full consideration given to it in an earlier chapter renders discussion of it unnecessary here.

For purposes of comparison and reference as we deal with the several types of money, Treasury figures on the circulation for June 30, 1928, are given. On that date we had a total stock of coin and paper money of more than eight billion one hundred and eighteen million dollars, but little more than half of this imposing total was in circulation, that is, in the tills of banks and business houses and in the pockets of the public. The rest, principally in the form of gold, was held in the vaults of the Treasury and the Reserve Banks, most of it being security for gold and silver certificates and greenbacks, or specie reserves of the Federal Reserve System. The following table shows the amount and proportion of the different forms of money in circulation:

Kind of money	*Total*	*Per capita*
1. Gold coin	$377,017,224	$3.19
2. Gold certificates	1,019,148,559	8.61
3. Silver dollars	46,222,651	.39
4. Silver certificates	384,576,612	3.25
5. Small silver	278,173,914	2.35
6. Minor coins	111,066,572	.94
7. United States notes	298,438,352	2.52
8. National bank notes	650,211,920	5.49
9. Federal Reserve notes	1,626,432,872	13.74
10. Federal Reserve bank notes	4,028,984	.03
11. Treasury notes of 1890	1,303,600	.01
	$4,796,621,260	$40.52

Data covering the outstanding amounts of the various kinds of money in a country can never be strictly correct. A considerable percentage of an issue is destroyed or other-

wise irretrievably lost. The Treasury undertakes to estimate the amount annually lost to circulation but there is always a large margin of error. The eleventh item—Treasury notes of 1890—is typical of what happens to a currency issue. This issue amounting to $150,000,000 was called in some thirty years ago, yet more than a million dollars is still reported as being in circulation. Occasionally a stray note may appear for redemption, but the remainder have either been destroyed or have found their way into money collections. Shortly, the same thing will hold true of the tenth item, Federal Reserve bank notes, which were retired from circulation in 1921.

The proportions shown in the table are not the result of public taste or habit to any considerable degree. The public does not care what kind of money it has, so long as it has the denominations it needs and its preferences for paper or coin are taken into account. The heavy demand for five and ten dollar bills is met equally well by certificates, greenbacks, national bank notes, and Federal Reserve notes. Since the Federal Reserve Act abolished vault reserve requirements, even the banks are indifferent as to what kind of currency they have, except where gold is being acquired for export or the five per cent lawful money redemption fund back of the national bank currency needs to be replenished. The proportion of the different moneys, then, is largely a matter of existing laws and Treasury policy. As the country grows, the need for more small change is supplied by purchase of the necessary materials by the mint and conversion of them into additional coins, while the need for more of the larger denominations would have to be met by issues of Federal Reserve notes against commercial paper, or gold certificates against the Treasury's stock of gold. If, as seems likely, our abnormally large percentage of gold shrinks to typical proportions, we shall then want to impound our gold and certificates in the Federal Reserve System where they

will serve as the basis for issues of reserve notes and deposit credit by the twelve banks.

The total per capita circulation at any given time depends largely upon the prevailing price level. This may sound like placing the cart before the horse, but it is not. Whether a rise in prices comes about from a falling off in the supply of commodities or an increase in the purchasing media, it will result in a demand for more till and pocket money. Enough of the additional volume of medium of exchange will have to take the form of money to enable the public to carry on its smaller transactions.

2. Gold as a Circulation Money

In a preceding chapter we considered the problems arising out of the use of gold as our monetary standard. Our interest in it here concerns merely its use as a circulation money. Before the World War, gold coin was widely used as pocket money throughout the more prosperous portions of Europe, and in the western part of the United States. It could have been had in other sections of this country, but a preference had developed for paper money. Gold is not the most economical or convenient form of circulation money. The small denominations are easily lost and any considerable sum in gold pieces is too heavy for pocket use. In spite of the high degree of skill attained in the art of coinage, there is a constant loss of metal through abrasion. The central banks of Europe, however, were forbidden by law to issue paper currency in small denominations, although in the fourteen years immediately preceding the war, there was a tendency on the Continent to greater liberality in this direction, simultaneously with a beginning by the central banks at collecting and holding gold. For the most part, however, the chief reliance of the public was the gold and silver coinage. In England the lowest denomination of Bank of England notes was £5,

or approximately $25; hence the man on the street seldom had paper money in his possession, unless he lived in a community where one of the rapidly disappearing provincial banks of issue was located.

In the Pacific Coast states, the adherence to gold was merely a survival of the old days of depreciated money of the Civil War period, when this gold-producing region made a determined and, on the whole, successful effort to keep the greenback out of circulation in the far West. After the greenback attained a parity with gold, the habit of using specie continued, until it was brought to an end, so far as gold was concerned, by the mobilization of gold in the Reserve System at the time of our entrance into the World War.

The prohibition of smaller denominations of paper money in Europe probably grew out of the desire to protect the man of slender means from loss in case the issuing bank was unable to meet its obligations, and the carrying out of what was known as the "gold saturation" idea, of keeping a portion of the nation's gold stock out in circulation where it would be available in case a great emergency caused the normal holdings of the central bank to prove inadequate and yet would not be an excuse for inflation of note issue or subject to the liability of serious depletion.

As was the case in the United States, European countries, upon entering the war, impounded gold in their central banks. Numerous types of coercion, patriotic appeal, and other devices for securing it were employed. Since specie payments were suspended and the volume of paper currency and deposit credit was expanding rapidly, even the gold which did not find its way into the central bank vaults was hoarded or exported. Although all of the leading countries have nominally, at least, returned to a gold basis, only gold bars in rather large quantity can be had in exchange for paper money in most of them. Gold coin has not returned to active pocket use and is not likely to do so. When a people become

habituated to carrying paper and silver and have complete confidence in their equality of purchasing power with that of gold, they come to prefer them as circulation money. In view of the fact that one seldom sees a gold piece in circulation in the United States, the figure of $377,017,024 for gold coin in circulation seems very high. A study of the content of the vault cash of banks shows that most of this sum lies inactive there, and in the strict sense of the word is not in daily use as a circulating medium. If the generally prevailing fear of a future shortage of gold materializes, the habituation of Europeans and Californians to other forms of pocket money will have furnished another justification for the World War.

The gold certificate has little individuality as money. A twenty-dollar certificate, for example, is a warehouse receipt for twenty dollars' worth of gold which lies inert in the Treasury while its paper representative is in circulation. It serves, however, at least two useful purposes. In the first place, where accumulations of gold are required for reserve purposes or a substantial gold payment is called for in a contract, the certificates are much more convenient than the actual gold. Second, where it seems desirable not to have the whole of the gold stock of the nation impounded in its central banking organization, gold certificates form a much more acceptable medium of exchange. The present very large gold certificate content in our circulation money is due to a desire on the part of Treasury and Reserve System officials to lower the abnormally high specie reserve ratio which obtained after the post-war deflation. A ten-dollar gold piece in the Treasury can support but ten dollars' worth of paper currency in the form of a gold certificate out in circulation. If this certificate is shipped to a member bank by a Reserve Bank in response to a request for currency, the latter's basic gold reserve is reduced by ten dollars. If, on the other hand, it retains the ten-dollar gold certificate, it can issue twenty-

five dollars' worth of its own notes against the certificate plus commercial paper collateral. So long as proper restraint is exercised over the extension of credit, the presence of gold reserves of even a hundred per cent or more need never cause concern, but if they furnish a constant temptation to over-expansion, it is good strategy to lower the reserve ratio by injecting gold into pocket circulation by way of certificates.

From the standpoint of security and parity the gold certificate is a perfect form of money, since it is backed to the amount of its full face value in gold and is directly convertible. It does not possess the attribute of elasticity, because changes in the volume of certificates in circulation do not vary automatically with variations in demand for currency. However, as we have observed in other connections, so long as one kind of money in the system does possess this quality to a satisfactory degree, it is not essential that the others have it.

The Federal Reserve Banks now have complete charge of furnishing currency to the country, having taken over the work of the old sub-treasuries. If their reserves fall to the point where they need to recapture the gold certificates out in circulation, this can be done by replacing them with other forms of money, particularly Federal Reserve notes, as the certificates come in. Since our stock of approximately 4.8 billions in circulation money passes in and out of the Reserve Banks at the rate of about two and a half times every year, the impounding of any particular type of currency is not a difficult matter.

It can be seen, then, that although the gold certificate has not an essential part to play, and, in fact, is not employed by other countries, it performs a sufficiently useful service to justify its retention. It has never been the occasion for the slightest trouble and short of outright dishonesty on the part of the government, one can hardly conceive that it ever could be a source of annoyance or embarrassment.

3. The Silver Dollar and Certificate as a Part of the Circulating Medium

Most people of the United States dislike the silver dollar as a pocket money. It does, however, still retain its hold in certain rural sections in various parts of the country and is generally preferred to small paper currency in sections of the Pacific Coast. As time goes on, it forms a relatively smaller part of the country's so-called large change. From time to time, when a zealous secretary of the Treasury has sought to extend its use, his efforts have met with failure. At the time the silver dollar was devised by Hamilton, the public was accustomed to the Spanish dollar of about the same size, which came into the country in the course of our trade with Spain and her possessions and remained to fill the void in our circulating medium. Hamilton's new silver dollars, therefore, were entirely acceptable and carried much more confidence than a paper substitute, in days before the art of making counterfeit-proof currency had been developed.

In view of our more recent experience with the silver dollar, it is important to note that for the first eighty-seven years of our history we were relatively inexperienced in the use of this kind of money. When in 1879 it began to be forced into circulation, it came into the hands of a people who had not been habituated to its use; hence it never has been a popular form of money.

As soon as the mint opened to the free coinage of both gold and silver, in 1792, silver dollars were produced, but shrewd Yankee traders found that the undiscriminating native of the West Indies would trade his heavier but less attractive dollars for the bright new American pieces. The result was that the traders were selling Spanish dollars to our mint at a profit and denuding the country of its own coins. After almost a million and a half dollars had been struck, to no avail, their coinage was suspended, and reliance

for large change fell upon the small bank notes and coins of small denomination. In 1834 the ban was removed from the coinage of dollars, but from this time silver became worth so much more as metal than as money that in the whole period from 1834 to the outbreak of the Civil War little more than two and a half million in silver dollars was issued, and this went very largely into trade with the Orient. It was not until the marked decline in the price of silver bullion occurred in the early 'seventies that silver dollars began to find their way back into the United States and an incentive existed to take silver to the mint. Of the 3,900,000 silver dollars coined in the whole period from 1792 to 1878, almost two-thirds were brought to the mint in the years 1871 to 1873.

In 1873, Congress engaged in the task of revising our currency laws preparatory to a return to a specie basis, after some ten years of depreciated paper money. Since the silver dollar during all of our previous history had been little more than a name to the average citizen, it was decided to drop it from the list of coins authorized to be struck at the mint. Up to this time the mint had been open to the free coinage of both gold and silver, but as we noted, silver had been under-valued when the mint ratio was placed at 16 to 1, in 1834. The practical result was that, in a sense, we became a gold standard country at that time, since the bullion value of the silver dollar was in excess of 100 cents until 1874. The silver dollars we did coin right up to the passage of the demonetization act of 1873 found their way into foreign trade where they circulated by weight instead of by tale.

There had been a growing sentiment, the world over, against the bimetallic standard. Great Britain, in 1816, closed her mints to the free coinage of silver and made her silver coins definitely subsidiary to gold. In 1853 we had followed her example with respect to our small coins but had ignored the status of the silver dollar, since we had none in

use and did not feel the need of having any. When, in 1873, we did take action and dropped the dollar entirely, we could have saved much difficulty later by stating unequivocally that hereafter we proposed to operate on a single gold standard basis and to maintain all other forms of money at a parity with our gold coins. By merely omitting the silver dollar from the list and taking no further action toward abolishing the double standard, we left a door open for the friends of silver which we did not succeed in closing and locking until 1900.

When in 1874 and the years following, the price of silver had fallen to a point where dollars did come back into circulation, they occupied an anomalous position: they were full legal tender and not subordinate to any other kind of money, and yet were no longer recognized as having an existence in our system of coinage. The United States was not alone in this peculiar predicament. Germany, in 1871, had closed her mint to silver and her old three-mark piece, the *Thaler,* was in the same situation as our dollar. France and the other members of the Latin Union took similar action and had a large supply of five-franc pieces left in circulation which were not redeemable in gold but which retained all of the privileges of standard money with the exception of free coinage. A country in such a situation is said to be on a limping standard rather than a strictly gold basis, for the irredeemable coin in the system gives it a lame leg, so to speak.

The serious curtailment in the market for silver caused by its demonetization in several important countries, coupled with a very large increase in world production, brought about a decline in the price. This aroused the silver interests of the United States to take a hand in our financial legislation. In their effort to re-open the mint to the free coinage of silver, they found a strong ally in the farmer and other interests who had felt the effect of the régime of falling prices which always follows a great war. Beginning with

the presidential campaign of 1876, and continuing their efforts in Congress and with the voter until the second defeat of Mr. Bryan in 1900, they strove hard to restore the bimetallic standard at the old ratio of 16 to 1, realizing that this undervaluing of gold would drive it out of circulation and would place the country, for all practical purposes, upon a silver standard. Even when silver became so cheap that its value was but one thirty-fourth that of gold, they still insisted that the two metals should be accepted by the mint on a basis of 16 to 1.

The friends of silver never quite succeeded in restoring its free and unlimited coinage, but they were sufficiently powerful as late as 1918 to wring concessions from Congress. The first of these measures, the Bland-Allison Act of 1878, compelled the Treasury to buy not less than $2,000,000 nor more than $4,000,000 worth of silver bullion every month, and coin it into silver dollars. Being none too sympathetic, the various secretaries of the Treasury who served during the life of this provision (1879–90) bought the minimum amount. Even at that, $352,000,000 silver dollars were thus added to the circulation.

The Republican majority in 1890, in order to muster enough votes to pass their pet tariff measure, the McKinley Bill, had to increase their concessions to the silver group in Congress by passing an even more liberal silver purchase act known as the Sherman Law. Monthly purchases were placed at 4,500,000 ounces, an amount which in the three years the arrangment was permitted to exist eventually caused 218,000,000 more silver dollars to be added to the largely unused existing stock. The latter purchase was not converted into coins until after 1898, being retained in bar form in the Treasury as security for $150,000,000 worth of new government paper money, issued for the purpose of reimbursing the Treasury for its payments to the sellers of the bullion. Thus a government which during its entire life of ninety

years had coined but eight million silver dollars and dedicated most of them to the purposes of foreign trade, in a brief period of about twenty-five years undertook to force 502 millions of them into circulation on the sole ground of political expediency.

With the rapid growth of our retail business in the period following the Civil War, there was need for an increase in the supply of large change, but this fact does not in any way justify such measures as the two purchase laws just discussed. First of all, the satisfaction of a need for additional currency should be divorced from partisan politics and from the selfish interests of particular groups. Second, these silver dollars from the start showed themselves to be an unpopular form of money by returning to the Treasury as fast as they were issued. Silver certificates had to be devised as a means of keeping the new coins employed by proxy. Third, the amount of new dollars was not determined with reference to the average monthly growth of business or the effect an overissue might have upon the credit situation. Fourth, no provision was made for the redemption of the new coins or their certificates in gold. Our very limited stock of gold, therefore, had had thrust upon it, in a period of fifteen years, the responsibility for keeping 346 millions in greenbacks at par, as well as the struggle to maintain itself in its position as our standard of value against a flood of 352 million Bland-Allison dollars and 150 million Treasury notes of 1890.

In 1893, an unfavorable trade balance, coupled with hard times at home and a deficit in the Treasury, made an ideal setting for the overthrow of our monetary structure. Gold was being withdrawn by the redemption of the greenbacks and notes of 1890, while the public were paying their obligations to the Treasury in silver and paper. The situation was rapidly becoming so critical that Congress was called into special session to provide relief. It repealed the pernicious Sherman silver purchase arrangement but provided no

means of ending the serious deficit in the Treasury or replenishing a depleted stock of gold. What the outcome of it all was we shall see when we consider the greenbacks and their part in it.

The Act of 1898 provided that the Treasury notes of 1890 should be called in and the mass of silver bars back of them should be coined into dollars. This task was completed in 1904 and brought the total to 570 millions, as previously indicated. We have seen from our Treasury statement for June 30, 1928, that but 46 millions of these are in actual circulation, the public employing most of the remainder indirectly through the silver certificate.

Together the dollars and certificates in circulation constitute but seven per cent of our monetary stock, so that from the standpoint of volume they are not likely again to menace the stability of our standard. They do stand, however, as an unpleasant reminder of the selection of highly improper objectives in making changes in our monetary system.

In the legislation of 1900, which was designed to place the country definitely upon a gold basis, it was originally provided that the silver dollar and certificate should be placed in the same category with the smaller silver pieces, i.e., made limited legal tender and directly redeemable in gold. The silver interests, however, were still powerful enough to secure the elimination of any provision which stood in the way of restoring the silver dollar to an equality with gold. Consequently, silver dollars are still inconvertible, legally speaking. There is, however, a clause in the Act of 1900, which it is believed could be interpreted with sufficient liberality to enable the Secretary of the Treasury to convert silver dollars into gold, even in a severe monetary crisis when extraordinary means would have to be employed to obtain it. This clause states that it shall be the duty of the Secretary to maintain all of our money at a parity with gold.

In our discussion of the Federal Reserve bank note, refer-

ence was made to a piece of legislation passed in 1918, known as the Pittman Act. This measure, it will be recalled, authorized the Treasury to sell not more than 350 million silver dollars to the British government for use in the coinage of Indian rupees. The needs of our ally furnished an excellent opportunity to rid ourselves of this needless mass of silver and to substitute small Federal Reserve notes for the silver certificates in our one- and two-dollar currency. The former require but a forty per cent gold reserve while the latter must be backed dollar for dollar with silver tokens which in their turn must depend upon the gold stock of the country for their parity. At present when the silver dollar has a commodity value of less than fifty cents, it is powerless of itself to keep silver certificates at par with one hundred cent gold dollars. A one- and two-dollar circulation made up of Federal Reserve notes would increase automatically with the need for small denomination currency, while under the existing arrangement, if the growth of trade calls for more small bills than the strictly limited amount of silver and greenbacks can supply, an Act of Congress would be necessary to provide them.

The friends of silver, still a power in politics, saw to it that a provision was inserted requiring the Treasury to repurchase at one dollar per ounce, from American sources, an amount of silver equal to what it had sold. In all, 207 million fine ounces were actually required. All of this could have been bought on the competitive market for about sixty cents per ounce instead of the dollar specified in the Pittman Act. Beginning in 1921, the newly acquired silver was coined into 271 million dollars, although a fraction of that number would have satisfied the circulation demand for silver dollars. Again the Treasury made an effort to encourage their use, but the public did not respond.

The logical way out of the situation would have been for the Treasury to take advantage of that rare opportunity dur-

ing the World War when silver dollars were worth more than a hundred cents as bullion, and to rid the government of this large stock of superfluous metal. Enough silver dollars could have been retained to provide for the needs of those portions of the country which have a genuine preference for them. This quantity at present amounts to less than a tenth of the existing stock. It might well be made subsidiary coinage like the smaller silver pieces.

There is, however, a practical difficulty in the way of retiring silver dollars and certificates and substituting the notes of the Federal Reserve Banks for them, in that the former require no specific gold reserve, while a substitute issue of more than a half billion dollars in Federal Reserve notes would require a 200 million dollar addition to our working gold reserves.

4. The Status of the National Bank Note

In other connections we have had occasion to deal with the national bank note. We are concerned here with its status as one of our circulation moneys. It will be recalled that, in spite of the fact that the reformers had long advocated the abolition of bond-secured currency, the Federal Reserve Act failed to require such a step. True, the Act does offer some aids toward its retirement, but, on the other hand, it provides for the perpetuation of the same kind of bond-secured issue in the shape of the Federal Reserve bank note. As the thing has worked out, the Reserve Banks have had the wisdom not to perpetuate this latter species of currency, but the national banks have not made any material reduction in their total volume of notes, except as the maturing of a large issue of United States bonds, in 1925, forced the retirement of the currency for which they were serving as security.

In the period preceding our entrance into the war, there was some disposition to take advantage of the conversion

privileges provided by the Reserve Act. Some 74 millions in two per cent bonds were acquired by the Reserve Banks, which promptly converted 56 millions of them into three per cent bonds that did not bear the circulation privilege. When the Liberty Loans were launched, the price of the three per cent securities declined to a point where the Reserve Board considered it unfair to ask a Reserve Bank to accept them in exchange for two per cent bonds purchased at or near par. This fact, together with the greatly increased need for all forms of money, occasioned by the rapid rise of retail prices, caused a halt in the retirement of the national bank currency.

The price of United States bonds has always been a more potent factor in a national bank's decision regarding note issue than have the currency needs of its constituency. All this shows the wisdom of placing the function of note issue in the hands of the central bank organization and upon a more elastic basis than government bonds.

With the retirement of 109 millions of eligible bonds in 1925, the price of securities carrying the circulation privilege has been high, and banks are not willing to sell them to the Reserve Banks at par. Forty millions in national bank notes were retired in 1927, but only nine millions of this amount were withdrawn voluntarily. The rest represents failures and liquidations of national associations. This substantial progress toward retirement, however, was more than offset by an increase of 42 million dollars in circulation by new and old national banks.

Note issue has its strongest hold in the rural districts. More than a thousand banks, chiefly urban, issue no notes at all. The national banks of New York City, in 1927, issued but 32 millions of the 215 millions which the amount of their capital would permit. On the other hand, in regions outside of large centers, the average circulation is about sixty-five or seventy per cent of the authorized maximum. For the country as a whole, as against a paid-up capital of one and a half

billions, a circulation of 661 millions was outstanding. Too much significance should not be attached to this proportion, however, for only 674 millions of bonds are available for circulation purposes no matter how many more the banks might choose to employ if they could get them.

Whether the active retirement of notes through Federal Reserve channels will be resumed depends upon the money market. If the price of the two per cent bonds should fall materially, because of a stiffening of interest rates, offerings would probably be made to the Reserve Banks and a corresponding amount of notes be withdrawn from circulation. The immediate future of the national bank note therefore, hinges upon the rate for money, but there is looming ahead a factor of much greater consequence, viz., the policy of Congress relative to the consols of 1930. If it is agreed that the national bank currency should be retired as soon as possible, the Treasury will call the 590 millions of two per cent bonds which are callable after April 1, 1930. This would leave but 84 millions of eligible bonds, or in other words, would of itself virtually wipe out our national bank currency.

Congress is likely to be governed by the wishes of the national banks. If a protest is made by the banks against the calling of the consols it is unlikely that they will be disturbed. National banks derive some benefit from the publicity and prestige acquired from the issue privilege. There is also some extra net profit derived from lending the notes and drawing interest on the bonds, as opposed to lending the money which would have to be paid for the bonds. Already Comptroller of the Currency Pole has voiced his opposition to the retirement and the national bank division of the American Bankers Association (1928) has gone on record as opposed to the calling of the bonds which support nine-tenths of the circulation. Moreover, inasmuch as we would still have ten other forms of money, the abolition of the national bank note would not contribute much to the cause of mone-

tary simplification. The privilege of note issue is about the only outstanding mark of distinction enjoyed by national banks, and if it results in some institutions retaining their federal charters and thus automatically forming a part of the Federal Reserve structure, that is a point in its favor. The United States is paying but 2 per cent interest upon the consols of 1930. Any bonds it sells to replace them must bear a higher rate if they are to sell at par. It is doubtful if the advantages of national bank note retirement warrant the increased interest burden. Lastly, national bank notes would be replaced in circulation by Federal Reserve notes. No specie reserve is required for the former, while the introduction of the latter would necessitate an impounding of forty dollars in gold for each hundred dollars in notes. So long as our gold stock continues to be more than adequate for our monetary and credit needs, the change would entail no strain upon our structure, but if through loss of gold by export and increase of rediscounts our gold reserve approaches the legal minimum, an additional strain upon it would be ill advised.

Like the silver dollar then, the bank note is doing no particular harm and is not likely to do so. It has outlived the purpose for which it was devised, viz., the provision of a safe uniform currency and the creation of an artificial market for government bonds, but there is not sufficient object in its removal to warrant the expense to the public and the added burden upon the gold reserve.

5. The Status of of the Greenback

The disastrous experience of the Continental Congress with issues of government paper money, together with equally unfortunate experiments by the colonies, along the same line, had created a strong sentiment in favor of a specific prohibition of legal tender notes by the Federal Constitution. Such a provision was not actually incorporated but it was the sense

of the convention that it had left the Federal Government without the right to raise money in this manner. In the interval between the adoption of the Constitution and the outbreak of the Civil War, the Treasury did resort, on several occasions, to small issues of non-legal-tender Treasury bills which bore no interest and passed freely in circulation. They were not regarded as a permanent part of our monetary stock and were retired as soon as the critical situation which called them forth had passed. It was generally believed that Congress had no authority to issue legal tender paper money.

Borrowing by means of an issue of legal tender, non-interest-bearing currency, is distasteful to high-grade public officials. They resort to it, directly or through the central bank, when a considerable sum is needed sooner than it can be obtained through taxation or bond issue or when they have serious doubts as to the ability or willingness of the public to contribute adequate funds by these more approved methods. A nation should pay as it goes, by increasing taxes as additional outlays become necessary. If, as is almost invariably the case in war, an increase of taxes to a limit consistent with unhampered production does not produce sufficient revenue, the remainder should be obtained by the sale of bonds.

Unfortunately, few countries have been able to escape the resort to forced loans in the form of legal tender notes, when a war of great magnitude had to be financed. In 1914, for example, all of the belligerent nations promptly suspended specie payments and resorted immediately to huge issues of inconvertible notes and deposit currency. The Continental countries gave their central banks *carte blanche* in advancing the great sums needed immediately for putting the armies in the field. Great Britain relied upon an issue of government paper money and the deposit credit placed at her disposal by the Bank of England. The United States alone was able to see the struggle through without suspending specie payments or resorting to issues of irredeemable paper. We

should not take too much credit to ourselves for this achievement, however, for during the three years preceding our participation in the war we had prospered greatly, having taken full advantage of the opportunities which a European war afforded to business.

Our situation in 1861 and 1862 was in striking contrast with that of 1917. The Northern armies had suffered disheartening reverses. The credit of the country was weak, and a bad Treasury situation inherited from the Buchanan administration was growing steadily worse. European countries were unwilling to risk their money on so hazardous a situation; so our bond sale activities had to be confined to the northern portion of the United States. Even here the Lincoln administration was none too sure of its ground. Indifference and disloyalty seemed so prevalent that the President and Secretary Chase feared the consequences of a tax and bond program of sufficient size to meet all of their requirements.

On the other hand, they viewed with extreme reluctance resort to an issue of legal tender notes. In the first place, the constitutionality of such an act was very doubtful. Second, the notes would have to be inconvertible for a long time to come, because of the miserable plight of the Treasury. This alone would cause them to depreciate in terms of gold, not to mention the further loss in purchasing power they would sustain as their quantity inflated the medium of exchange and their velocity of circulation was accelerated with an increasing loss of faith in them.

In the third place, it was realized that a war financed by irredeemable paper is much more costly. A government in buying with depreciated dollars has to make increasing outlays for the same quantity of materials as succeeding issues of currency drive prices higher. If when peace-time conditions again prevail, the obligations issued on a depreciated basis are met at their face value in gold, a great burden is

placed upon the tax-paying constituency. In the World War, for example, Russia and the Central Powers had carried their use of legal tender notes to such a wild extreme that nothing short of a repudiation of the whole mass was feasible. France, Belgium, and Italy kept their issues relatively within bounds, but in their recent reconstruction plans have scaled down their obligations to a fraction of their original face value.

A fourth consideration was that, if resort is had to financing through issues of depreciating notes, a government violates one of the fundamental principles of taxation, viz., that contributions to the support of the state should be made upon the basis of ability to pay. Issues of inconvertible paper work in the opposite direction. The wealthy will dodge them by requiring in their contracts that specie or commodities be tendered in payment. The small merchant and the working man are under a sort of compulsion to accept the kind of money that is offered them, since they are not in a position to argue the matter. The recipients of fixed incomes, whether salaries or interest, are also victims of a monetary régime which causes the purchasing power of incomes to shrink.

The administration and its leaders in Congress were well-informed on these objections to the use of legal tender notes, but they decided there was no other way out. Later, Secretary Chase as Chief Justice of the Supreme Court of the United States condemned the use of legal tender power, saying that it had been useful only "for purposes of dishonesty." It is difficult to see how he could have arrived at such a conclusion when his efforts to raise money by the use of notes without this power had not been crowned with success, while the legal tender greenbacks had served the purpose for which they were created. It is most unfortunate that a government ever has to resort to this means of obtaining revenue, but when it is driven to such a step it should insure its effectiveness by the use of the legal tender power. This is hard on the great mass of people who are unable to evade it, but

if the acceptance of a relatively undesirable form of money is made optional, the issue will fail to circulate and its object will have not been achieved.

Whether the Lincoln administration misjudged the public temper with regard to a vigorous tax program will always be a matter of dispute. Some careful students of the subject insist that the people would have rallied to the President's support in adequate fashion and accepted as early as 1862 the heavy burden of taxation imposed during the closing years of the war. If the banks and the Treasury had been so situated that they could have arranged for a temporary financing until the public could have been won to an adequate tax and bond program, the issue of the greenbacks might have been avoided. Unfortunately, the stock of specie was entirely inadequate to serve as the basis for an adequate volume of such short-term operations as the Treasury carries on in anticipation of loan receipts or tax payments.

The question as to whether Congress was within its constitutional rights in issuing the greenbacks came before the Supreme Court in three different phases. The first, in 1869, had to do with the debts incurred before the greenbacks were issued and payable after their issue. In this instance, the court held that obligations calling for specie were not dischargeable in greenbacks. A further ruling made at this time to the effect that any obligation incurred before the greenbacks were issued must be paid in terms of specie was reversed the following year after the size and personnel of the court had been changed. At this time, the justices by a five to four vote ruled that, so far as concerned debts contracted after the greenbacks were issued, Congress had a right to enforce their payment with these depreciated notes. The decision was based upon the theory that a nation has a right to self-preservation and since this act was regarded as essential to the national defense, Congress had a right under its war powers to resort to it.

The greenbacks continued to have legal tender power even after the war was over. Hence the third phase came up later for decision (1884), viz., whether a creditor who was compelled to accept them after there was no longer a state of war, had been deprived of his constitutional rights. With but one dissenting vote, the Supreme Court held that the use of the legal tender power was one of the privileges universally enjoyed by sovereign states both in war and in peace, unless it had been specifically relinquished by a country's constitution. Many opponents of government paper money have accused the justices concerned in the second and third decisions of having stretched their consciences in order not to precipitate a most embarrassing situation. Be that as it may, it was fortunate that after the mischief was done, and many millions of transactions had been carried on under a greenback standard, the court did not declare the whole business unconstitutional and involve the country in a hopeless tangle of litigation.

The greenbacks were actually issued to the extent of about $400,000,000. It was originally provided that they could be converted into six per cent bonds. As our credit improved and these bonds rose in price, advantage would have been taken of this option and the retirement of these notes would have been automatic and painless. Unfortunately, the arrangement was repealed before there was any inducement to make use of it.

We have recited the ills which threaten a government if it resorts to the issue of legal tender inconvertible currency. These were all realized to the extent that the Union employed this type of financing. The cost to the Treasury of its war materials was greatly increased, particularly in the dark days of 1864 when a greenback dollar had but thirty-nine cents' worth of purchasing power, in terms of gold. The cost of living, naturally great in war times, no matter what method of finance is employed, was enhanced by the use of irredeem-

able paper money. Speculation in commodities, and particularly in gold coin and bullion, resulted from the employment of a fiat money as a standard. A regular exchange had to be set up for the purchase and sale of gold for export and other uses. On "Black Friday," in 1869, Jay Gould undertook to corner the supply of gold which various buyers were under contract to obtain at that time, and before his efforts were halted a disastrous panic ensued.

As early as 1865, the Secretary of the Treasury began to reduce the volume of greenbacks by converting them into interest-bearing securities. At first, he had the hearty support of Congress, which had never had any particular pride in the creation of the greenback or its subsequent performances. By 1867, however, when he had reduced the volume to 356 million dollars, a sentiment had begun to develop against further contraction. The deflation which invariably follows a war was proving most disturbing to producers and debtors. In response to this opposition, Congress reversed itself and prohibited any further reduction in the volume of the greenbacks. Some of them were even reissued, in the Grant administration, bringing the total to 382 million dollars. By 1874, conditions were sufficiently stable so that Congress was in a mood to proceed with their retirement. The Treasury was ordered to reduce the volume to 300 million dollars and to be prepared to redeem them in gold on the first of January 1879. Before that date arrived, Congress again changed its mind and fixed the minimum where it is today—346 million dollars. Not only was the pledge of the Lincoln administration to call in these obligations ignored, but it was specifically provided that when any of them did come into the Treasury they should be returned forthwith to circulation.

Resumption was accomplished according to schedule, so that, since 1879, the greenback has remained at par with gold. The task of keeping it there, however, has been fraught with much expense and great danger to our financial system. Con-

gress did not set up a formal redemption fund in the Treasury until 1900, but administrative recognition had been given to a $100,000,000 gold reserve for this purpose ever since Secretary Sherman had first collected it in the late 'seventies.

An unfortunate combination of conditions in the administrations of Harrison (1889–93) and Cleveland (1893–97) demonstrated how great a menace an improperly protected issue of currency can become. First came the increased purchase of silver provided by the Sherman law, with the added strain put upon the gold in the Treasury by the addition of the notes of 1890 issued to reimburse the Treasury for its payments to the silver interests. In three years, these notes added a burden of 150 million dollars to the 346 millions which the greenbacks had caused to be placed upon an all too meager gold stock. In the second place, the cancellation of some highly productive schedules in the tariff, together with the Harrison policy of increasing pensions generously, placed the Treasury in so precarious a position that Secretary Foster had to allow the redemption fund back of the greenbacks and notes of 1890 to fall below the $100,000,000 mark. Thirdly, the silver group, not satisfied with the compromises of 1878 and 1890, were clamoring for a return to bimetallism, with the result that the public was uneasy over the outlook and disinclined to put its faith in the stability of our monetary system.

Bankers, when asked for gold, began to give their customers one of the two forms of United States notes and let the customer look to the Treasury for his gold. Persons indebted to the United States ceased to pay in gold, using United States notes and silver dollars instead. The fund back of the former was dwindling so steadily that Secretary Carlisle was compelled to sell bonds to procure gold, for redemption purposes, since gold receipts through the usual channels had practically ceased. If the cash balance of the Treasury had only permitted the greenbacks to be withheld from cir-

culation until the run upon its gold had subsided, the trouble would not have been serious; but money was so scarce that when greenbacks were redeemed they promptly went back into circulation and were soon repumping the precious stock of gold out of the Treasury. This continuous process kept up until the Treasury had been compelled to borrow a total of 262,000,000 dollars' worth of gold. While, therefore, the great cost of maintaining the gold standard from 1893 to 1900 can partially be charged to other unwise governmental policies, the issue of the greenbacks and notes of 1890 must bear a large share of the responsibility.

We proceeded to retire the Treasury notes of 1890 and coin the silver back of them, so that, as we noted earlier in this chapter, they are practically out of existence. The Act of 1900 has placed the greenbacks in a position where they are not likely to do any further harm. A separate Treasury division of issue and redemption has been created and in it are segregated all funds held as security for currency. A hundred and fifty millions in gold has been placed there as a greenback reserve. When greenbacks are redeemed they cannot be re-issued except in exchange for an equal amount of gold. Furthermore, if the fund is ever reduced to less than $100,000,000 the Secretary of the Treasury must sell sufficient gold bonds to restore it to the $150,000,000 level.

Greenbacks today fill a useful place in our one and two dollar circulation, and in the larger denominations are not only used as till and pocket money, but serve as "lawful money," along with gold and silver, in the redemption fund of the national bank currency and as part of the 35 per cent reserve a Reserve Bank is required to maintain against its deposits. There are probably not anything like as many as 346 million dollars in existence after the losses of more than sixty-five years are taken into account. Even so, their amount is insignificant in our total of more than eight billions of money, more than half of which is gold. In such a setting,

they have about ceased to be the prey of currency reformers, whereas in 1893, when a total stock of gold of some 600 millions was attempting to keep in order 500 millions in government notes, not to mention 400 million silver dollars, small change, and national bank notes, the behavior of the greenback was a matter of genuine concern. Furthermore, at that time no gold was set aside specifically for their protection. Their volume is completely lacking in elasticity, but as we have indicated on several previous occasions, this is not a matter of consequence since we have provided elasticity through the operations of the Reserve Banks.

The Federal Reserve Act provides that any excess of Reserve Bank earnings over the six per cent dividend and the share allocated to surplus shall be paid to the government as a tax for the privilege of doing business. The Secretary of the Treasury may use this money to reduce our interest-bearing debt or may add it to the gold reserve back of the greenbacks. No mention is made of using this fund to retire greenbacks. It seems to have been the intention of the authors of the provision merely to increase the amount of gold back of them, perhaps to 100 per cent of the amount outstanding, virtually making gold certificates of them. The approximately $150,000,000 receipts from the franchise tax to date have been applied entirely to the interest-bearing debt. Solely as a matter of simplification, it might have been well to amend the Reserve Act so that the Secretary of the Treasury would be required to apply the proceeds of the tax to the cancellation of the greenbacks, even though they are a fairly useful and innocuous type of money.

6. Summary

The United States began its existence with a simple well-devised currency system. It has made numerous changes, some of which have improved it and adapted it to changing

conditions. Others have been in the nature of concessions to special interests or compromises of sound financial principle in order to meet a given situation. In times past, certain of the changes have later proved to be troublesome, but the currency today is so dominated by gold and Federal Reserve notes that the other elements are no longer a menace to monetary stability.

For the sake of simplicity and scientific correctness, we should eliminate: (1) the silver dollar and certificate, (2) the national bank note and Federal Reserve bank note, and (3) the greenback. This would leave us (1) standard gold coins and certificates, (2) subsidiary silver (3) minor coins (4) Federal Reserve notes. The first would serve as the reserve back of our circulation money and bank deposits. The rest would supply our circulation needs, the Federal Reserve note comprising the elastic element in the whole structure. As we have already observed, however, the mere attainment of simplicity would not warrant the strain upon our gold stock which the substitution of Federal Reserve notes for national bank notes and silver dollars would entail.

BIBLIOGRAPHICAL NOTE

For a history of our various kinds of money, one should turn to A. B. Hepburn, *History of the Currency,* and to Horace White, *Money and Banking,* both of which books we recommended in connection with a study of the nature of our monetary and banking policy in Chapter I. A. D. Noyes, *Forty Years of American Finance* (New York, 1909), and his later work, *The War Period of American Finance* (New York, 1926), cover the period from 1865 to 1925.

F. A. Bradford, *Money* (New York, 1928), contains a good description of the present status of our circulation moneys and a convenient résumé of their history.

In B. Nogaro, *Modern Monetary Systems* (London, 1927), one finds a useful modern work dealing with the development of monetary systems from a world viewpoint.

CHAPTER XI

MONETARY AND BANKING POLICY AS RELATED TO SPECIAL GROUPS

Our nineteenth century banking mechanism was much better adapted to the needs of business men than it was to other borrowers, in spite of the fact that we were not primarily a commercial people. As we have observed in another connection, we copied our banking ideas from an English situation dominated by commerce.

Banking development in the present century has concerned itself more with the peculiar credit needs of the other economic groups. The small urban borrower who has long been at the mercy of the loan shark and the pawn broker has recently been the object of special legislation. At last, after having his particular requirements disregarded by a nation in which agriculture was predominant for many generations, the American farmer has, since 1913, been the object of a veritable flood of credit measures. Liberal provisions for the rediscount of agricultural paper were made in the Federal Reserve Act, passed that year. Subsequent amendments have all been in the direction of greater liberality toward farm paper. In addition, two Federal rural credit systems have been created.

Since the social and economic consequences attached to the status of the farmer and of the urban worker are of much greater moment than is the case with any of the other groups which have been the objects of special credit arrangements, we shall confine this discussion to these two phases of credit reform.

A. Monetary and Banking Policy as Related to Agriculture

1. The Situation Prior to 1914

In the days when vast areas of free land were open for settlement, and the farmer labored with simple tools, while his household produced most of the articles of food and clothing required, there was little need for capital to invest in the permanent plant or for the financing of current operations. The few articles obtained from the storekeeper were bought on credit and paid for when cash crops were sold, or else farm produce was bartered for merchandise. From the earliest colonial period there was a clamor on the part of farmers for additional circulating medium, but this arose from the scarcity of pocket money and from a desire to acquire consumers' goods rather than from a need for capital. When a farmer in newly settled or less productive areas has had to borrow money, he has paid dearly for the accommodation. The risk involved and the distance from financial centers have contributed to the natural scarcity of funds which prevails in such regions. This situation, together with the stimulation to prices afforded by an increase in the quantity of money, has invariably won the support of the poorer and the newer farming sections for the succession of inflationary measures which characterized our monetary history up to the very close of the nineteenth century.

With the introduction of the reaper and other mechanical equipment, farming began its transformation into a capitalistic business, the process being aided by the gradual disappearance of desirable free land and the consequent increase in the cost of procuring farms. The steady flow of costly new mechanical devices, coupled with a marked betterment in his standard of living and in the quality of his flocks and

herds, compels the typical twentieth century farmer not only to make a heavy fixed investment in land and equipment but to have at his disposal a considerable fund of working capital for carrying on a season's operations.

Although the machine age in American agriculture had its beginnings in the pre-Civil War period, it was not until the rapid increase in the price of land and farm products began to manifest itself in the early twentieth century that attention was centered upon the credit needs of the farmer as opposed to proposals for bringing about an increase in the level of prices through additions to the supply of money.

A steady downward trend in prices, which had its inception in the cessation of hostilities in 1865, continued to the late 'nineties. Land values were still not very high, but great numbers of farmers were in debt. Consequently, as prices continued to fall, successive payments of interest and principal required increasing amounts of produce to meet them.

The determination to resume specie payment as soon as possible after the Civil War, together with the inauguration of a program for retiring $400,000,000 in greenbacks, had served to accentuate the normal price decline which follows a war. Undoubtedly, also, the imposition of a prohibitive ten per cent tax upon the issue of state bank currency had its part in the deflationary process.

After serious suffering in the panic of 1873, the farmer was easily enlisted in the cause of the Greenback Party, which advocated, among other things, a liberal issue of a national paper money, convertible into the interest-bearing bonds of the United States. A most impressive rural vote was cast for the party's candidates in the elections of 1876 and 1880, largely on the strength of the promised increase in farm prices and the eventual wiping out of a huge national debt without the necessity of increasing the tax burden.

Likewise, in 1876, the proposal to restore the bimetallic standard met with similar support. As we have seen in

another connection, the representatives of the southern and western states were able to obtain from the conservative majority in Congress the Bland-Allison silver purchase law as a concession.

Again, in the late 'eighties, the continued downward trend in the general price level gave rise to a further revolt of the farm population against a constantly appreciating standard of value. Through their organization, known as the Farmers' Alliance, the West and South made an impressive move to abolish all national banks and return to the free coinage of silver. The Alliance pledged itself to generous issues of government paper money which would be loaned at two per cent upon the security of land, or one per cent upon farm produce. The increasing need for more capital was undoubtedly present in these proposals but the objective still stressed was that of checking the decline in the prices of farm products.

During the period of the 1890's the situation which we have been examining reached its climax. At the beginning of the decade, the downward price trend was still in progress, in spite of a further increase of the currency under the operations of a second silver purchase act—the Sherman Law of 1890. Modern methods of farming had supplemented the old "hoe culture" in all but the most backward regions and, as a result, farm production had increased at a rapid rate. The discontented southern and western farmers under the aegis of the Populist Party again made an attempt to sweep the country in 1892 with a program similar to the one which the Farmers' Alliance had sponsored. Their disappointment over their defeat and their determination to secure relief were whetted by the disastrous effects of the panic of 1893 which followed soon after. As a result, the leaders of the movement were able to capture, for the first time, the machinery of one of the two old parties, the Democratic, and to cause a serious defection from the ranks of the Republicans. The deplor-

able condition of the farm states, coupled with the personal magnetism and eloquence of their presidential candidate, Mr. Bryan, enabled the Democrats in 1896 to carry all but five states west of the Mississippi, in addition to the Solid South. However, the steadfast adherence of the more populous eastern and north central states to the gold standard and their desire for the restoration of a protective tariff won the election for the Republican ticket.

Beginning in the late 'nineties, a combination of causes, prominent among which was a marked increase in the production of gold, brought to an end the long downward trend of prices, and initiated an upward movement which culminated in the post-World War crisis of 1920. During this latter period, the prices of agricultural products increased at a faster rate than prices in general. Consequently, Mr. Bryan's renewed appeal in 1900 for the restoration of the bimetallic standard failed to awaken as enthusiastic a response as it had in the previous election, and the issue passed into political limbo.

For the first two decades of the twentieth century, agriculture enjoyed the most prosperous period in its history. It was, however, not free from its financial problems, for, in most sections of the country, the farmer was paying far too high rates for the increasing amount of borrowed funds which high land prices and costly equipment were necessitating.

The well-to-do owner operator of the Middle West, it is true, was not concerned seriously over the rural credit situation. He had obtained his land many years before at a low figure, and had paid for it long since. He was able to participate in the rising standard of living and at the same time provide the money required for keeping his equipment up-to-date and for supplying the increased working capital needed for his operations. He could borrow at the local banks on about as favorable terms as were accorded business firms.

On the other hand, the thousands of farmers in other sec-

tions of the country who enjoyed no such financial solidity were experiencing increasing difficulty in solving their money problem.

The typical farmer has three types of credit need. First, if he does not have the necessary funds on hand he must obtain a loan to tide him over the growing season. Seed, and perhaps fertilizer, must be provided. Livestock will probably be bought for fattening on the feed left over from winter. Farm hands' wages must be met during the growing and harvesting period, and the household fed and clothed. We observed that the prosperous farmer could provide for these things out of his own accumulations, or by obtaining what credit he needed on favorable terms. The man less favorably situated has been able neither to rely upon his own resources nor to borrow at reasonable rates. In many sections short-term loans have been obtainable only by mortgaging one's chattels and pledging the growing crops. An interest charge of ten to twenty per cent has been the rule rather than the exception in more backward areas. The banks have obtained the more desirable of these loans and received the lower interest rate, while the merchant has taken the loans of insignificant size, waited a year for repayment of the trade credit extended, and in many cases had to supervise personally the borrowers' efforts at farming.

In the case of many of the negro and some of the white population of the South, the extremely high rates charged have not been much out of line with the risks involved. This type of farmer moves frequently from place to place, is an intermittent worker, and does not employ proper methods of cultivation. No system of credit which adhered strictly to sound principles could offer a solution for such a condition.

Such has not been the case with a great mass of thrifty hard-working persons of relatively limited resources who constitute a large part of our farm population. It is true that

their short-term obligations are not so attractive as high-grade urban business paper. They run for a longer period, are renewed somewhat oftener, are usually much smaller in amount, and do not give rise to the steady inflow of deposits which follows the sale of the merchandise for which the city bank loan was obtained. The farmer sells his crop all at once and receives a lump sum for it. However, none of these differences justify the margin of three or four per cent by which the short-term loan in newer farming sections has exceeded business paper in the cities. The difficulty has lain chiefly in the fact that the urban borrower has access to the almost unlimited funds of the large money markets, while in the more distant rural areas the supply of short-term capital has been largely of local origin and therefore meager in amount. In times when the demand for loans is at the peak, some help has been obtained from city correspondent banks, but, as we have seen in earlier chapters, re-discounting was not until recently considered a desirable banking operation, nor was the help always forthcoming when most needed. The remaining agencies of short-time credit have offered no solution for the problem of inadequate supply and high rates. From the earliest times, private lenders have loaned money for crop raising, and farm owners have financed their tenants' operations. Commission houses, warehouse concerns, and crop buyers have advanced money to growers and thus obligated them to sell the forthcoming crop to the creditor. For the United States as a whole, however, the total volume of non-banking resources has always been small, and therefore not a weighty factor in securing more reasonable rates.

The farmer's second type of credit need is for long-term or fixed capital required for purchasing a farm, for building fences, barns and silos, and for clearing, draining, or irrigating the land. The marked increase both in the price of farms and in the cost of labor and materials entering into their improvement has brought about a decided addition to

the volume of mortgage credit. In spite of this fact, however, the volume of funded debt in agriculture is still much less than that carried by the railroads and public utilities.

Under the facilities available before 1916, it had become increasingly difficult to retire the indebtedness on a farm. Mortgages were made for a period of three to five years, and a heavy commission was exacted when the loan was made and at each renewal. Instead of mortgage indebtedness being regarded as a more or less permanent obligation, as is the case with a railroad, the farmer was expected to retire it in a few years out of the profits of his operations. As interest, taxes, and operating expense mounted, he found this increasingly hard to do.

In the long-term credit field, not so much reliance could be placed upon the banks as was the case with short-term credit. National banks before 1914 could not make any farm mortgage loans at all, and state banks were either under severe restrictions or found it hazardous to tie up any large proportion of their assets in such unliquid form. The bulk of the farm mortgage money, therefore, came from outside of the borrower's community. Banks, mortgage companies, and individuals, acting as agents for insurance companies and private investors, placed large sums at the disposal of agriculture, but when a liberal commission was added to a going rate of interest already high, the cost of borrowed capital in newer sections of the United States was very burdensome to the farm enterprise.

Scarcely any progress had been made with plans for amortizing such obligations by means of easy annual payments, spread over a long period of years. Since no first-class lending agency would hazard an amount in excess of fifty per cent of the value of the farm, little help from this source was afforded the tenant who aspired to become an owner, for he could scarcely be expected to have saved the other half of the purchase price. Probably the best he could do was to

accumulate, say, twenty-five per cent more, and obtain the rest locally with a second mortgage bearing a very high rate of interest.

The third type of farm credit to which we referred has not until recently been differentiated from current or short-time requirements. It has been given the designation "intermediate" credit, for the reason that it provides the capital for operations which require a longer period for their completion than the single season contemplated when a short-term loan is made. The desirable limit for the latter is usually placed at six months, whereas certain operations in both agriculture and animal husbandry require some three years for their completion.

Nation-wide interest in the agricultural credit problem was first aroused in 1908 with the publication of the report of the Country Life Commission, appointed by President Roosevelt to ascertain the causes of and remedies for what appeared to be a growing dissatisfaction with farm life. It was the Commission's opinion that the inability of less favorably situated farmers to obtain adequate credit on reasonable terms was an important cause of the discontent. The report commended to the consideration of our law-makers the successful experience of European countries with coöperative credit.

Shortly thereafter the National Monetary Commission included in its publications interviews with the heads of various European coöperative credit organizations, all of which served to confirm the Country Life Commission's endorsement of the coöperative principle applied to agricultural credit.

Preliminary studies made by our diplomatic representatives abroad, at the request of President Taft, were followed by first-hand investigations by the United States Commission. In every case, the conclusion was reached that we should adapt the fundamental features of European rural credit practice to our situation. Out of these beginnings came a

succession of measures, each of which has been aimed at the inadequacy of our old methods of farm finance.

What the less-favored farmer has always sought in his advocacy of remedial legislation has been a better return for his capital outlay and labor. Before 1900, his interest lay in securing better monetary returns, and an easier discharge of his debt through a reversal of the downward trend of prices. In more recent years, although some proposals smack of re-inflation of prices, the emphasis has been upon larger profits through a more ample supply of capital, obtained at reasonable rates and on terms better suited to the nature of farm operations. Since the price collapse of 1920, the problem of dealing with the exportable surplus of farm crops and bringing about their more orderly marketing has occupied the center of the agricultural stage, but here again the objective is the same, viz., more adequate financial return. Although the farmer still blames the credit system for the unfortunate position in which he was placed, following the crisis of 1920, he has regarded the manner in which the system was operated as being more responsible for his undoing than were any structural defects in it. He supported further modifications sought by his political spokesmen in 1923, but he has not shown any great enthusiasm for them. In fact, he has virtually ceased to look to further credit legislation as a way out of his difficulties.

Since the major efforts at credit reform are closely associated with the operations of specific sets of institutions created in recent years, we shall center our more detailed consideration of the long, short, and intermediate credit problems of agriculture about these organizations which were devised in order to help solve them.

2. The Federal Farm Loan System

While the Federal Reserve Act of 1913 was by no means intended to be a measure of rural credit reform, some of its

provisions reveal the height which interest in the cause of farm finance had reached at the time the Reserve Act was in the process of formulation. It was generally recognized, however, that a comprehensive program of farm mortgage credit was outside of the purview of a measure designed primarily to supplement short-term credit facilities. Consequently, aside from a restricted grant to national banks of the privilege of making farm mortgage loans, the Federal Reserve Act, so far as rural credit is concerned, deals solely with the need of the farmer and stockman for more adequate seasonal loans.

Although most of the short-term credit features in the present Reserve Act antedate the passage of the long-term credit legislation by some two years, we shall consider the latter first, inasmuch as the working capital problem with which the former is concerned did not come to the forefront until after the mortgage credit situation had been quite fully met.

We have noted that American agriculture as compared with some other businesses has utilized relatively little long-time credit, but, as the value of farms has increased and lending facilities improved, a marked increase has occurred in the number of farms mortgaged and the sums borrowed. The following data from the United States census indicate the upward trend which preceded the crisis of 1920 and the reduction which followed in the subsequent period of financial readjustment.

	Percentage of Owned Farms Mortgaged	*Average Value of a Farm*
1890	27.8	$2,909
1900	30	2,896
1910	33.2	5,471
1920	37.2	10,284
1925	36.1	7,764

The amount of mortgage debt per farm had likewise increased from $1715 in 1910 to slightly over $4000 in 1925.

With the marked decline in land values and the wholesale recapture of farms by their mortgagees which has characterized the situation since 1920, the number and amount of mortgages have tended to decline, although the total volume was placed at the huge sum of nine billion dollars as late as the end of 1927.[1]

It can be stated with assurance, however, that heavy borrowing for the fixed capital needs of agriculture has come to stay. Farm values are bound to increase if the present steady growth of demand for agricultural products continues. Farming methods and an improving standard of living are also factors making for an increasingly large investment in the farm enterprise.

It is to the interest of the nation as a whole that ownership be made as easy as possible and that a plentiful supply of capital be available for a constructive type of farming. A preponderance of tenant farmers is bad both for the community life and the soil. The owner operator will tend to build up the fertility of the soil more conscientiously instead of "mining" it. He will be more interested in the improvement of beef and dairy herds and in the selection of seed. His influence in the community will be of a more constructive character.

The agricultural ladder, as the process by which a farm laborer ascends to the position of mortgage-free land owner is called, will function with increasing difficulty unless progress from round to round is facilitated by the provision of ample credit accomodation. In order to become a tenant the farm hand must have equipment and working capital. The tenant who aspires to farm ownership must be able to acquire his land on terms that are in keeping with a reasonable earning capacity. Under the arrangements which prevailed before 1917, and still are a prominent part of the present

[1] J. L. Loomis, Address before the Association of Life Insurance Presidents, New York, December 9, 1927.

mortgage credit structure, a farmer has had to possess more than average ability in order to live comfortably and at the same time wipe out his indebtedness.

It was to this problem that Congress turned, after the Federal Reserve Act was passed in 1913. With the information gathered from European experience as a starting-point, a period of more than two years was devoted by the appropriate committees to the formulation of comprehensive mortgage legislation. It was the consensus from the start that our outstanding credit problem was the relief of the less-favored sections of the country from an excessive burden of interest and commission, and from the necessity of either repaying or renewing loans every three to five years.

Until 1914, national banks had been forbidden to lend any of their funds on farm land. State banks, in most jurisdictions, were accorded some leeway in the matter, but between restrictive legal provisions and the interests of liquidity they have held a relatively small part of the total volume of farm mortgages, and the interest charge reflected the high cost of conducting a small rural bank.

Local retired farmers and other persons of means are not numerous in the areas where the demand for funds is most acute. Mortgage companies, local banks and individuals, all acting as agents for life insurance companies and other non-resident investors, loaned large sums, but the agents' commissions, added to the prevailing high interest rate, imposed an unreasonable burden upon borrowers.

Notwithstanding the fact that it had at its disposal the long and successful record of European countries with rural credit institutions, Congress had great difficulty in determining the proper course to follow. In fact, one hundred and six different bills were placed before it as partial or complete solutions of the problem. They varied in character from the extreme of government paternalism on one side to complete individual initiative on the other. The former authorized

direct loans from the Treasury at very low rates. The latter left the provision of mortgage credit to land banks to be owned and operated by private individuals. Still a third or middle group sanctioned the formation of a project in which the government and coöperative associations of borrowers would participate jointly in the operation of a system of land banks.

Finally, in May 1916, the so-called Federal Farm Loan Act emerged from the maelstrom of bills—a compromise between the divergent shades of opinion. It authorized the establishment, under national charter, of privately owned corporations to be known as joint stock land banks, but it also created with an initial Federal subsidy, a system of Federal Land Banks to provide mortgage credit to coöperative associations composed of borrowing farm owner-operators. All of the above institutions were to function under the direction of a Federal Farm Loan Board, set up as a bureau of the Treasury.

The Farm Loan Act introduced several significant changes in our American banking policy as related to the farm loan. First of all, it recognized and undertook to foster the coöperative plan of credit extension—an idea which had not made any considerable progress among our highly individualistic farm population. Second, it undertook to wipe out the marked differences in the cost of mortgage credit which prevailed. So successful has it been in this respect that for most of the time the System has been in operation the interest rate on Federal Land Bank loans has varied between 5 and 5½ per cent. In the third place, by the introduction of the amortization plan, the borrower was given the choice of paying off his loan in the minimum period of five years or spreading it over any number of years up to forty. Easy annual payments of principal and interest would therefore take the place of the large lump sum payments required under prevailing plans.

In the fourth place, by providing that either type of land bank could sell its tax-exempt bonds in the money markets, it placed at the disposal of the most remote farm enterprise the credit resources of the entire country on as favorable terms as are accorded to the largest urban industries. These mortgage bonds have proved to be a much more attractive investment than a mortgage on a single farm. They have the security of many farms back of them, and their unusually convenient denominations and freedom from taxation contribute further to the natural superiority which bonds possess over mortgages as investment instruments.

Aside from the necessity of pleasing all the important groups in Congress, the only justification for a dual system of land banks was that the coöperative credit idea might fail to take root in American soil and that an alternative plan should therefore be available. Some friends of the joint stock land bank plan entertained the hope that the old farm mortgage companies would convert themselves into joint stock enterprises. The fact, however, that the law limits the operations of the latter to two states has militated against the accession of the larger loan companies, some of whom operate in as many as twenty states.

As a matter of fact, the coöperative credit idea has made gratifying progress. In the short space of twelve years, close to five thousand local coöperative farm loan associations have been formed, 4670 of which were still functioning at the beginning of 1929. They are officially known as national farm loan associations and constitute the backbone of the Farm Loan System. They vary in size from ten members and $20,000 in loans to more than a thousand members and several millions in loans. Each member must be a borrower and is required to own capital stock in the association to the extent of 5 per cent of his loan. The association's local loan committee must first approve of the proposed loan, and then the Federal Land Bank, through one of its appraisers, investi-

gates the borrower and his farm. Not more than 50 per cent of the value of the land and twenty per cent of the value of the improvements can be loaned to any borrower. Even though a borrower can obtain the money to pay for his capital stock as a part of his loan, some prospective borrowers have been frightened away by the stock purchase requirement and the double liability which attaches to stock ownership. The provision is entirely praiseworthy, however, since it engenders a spirit of caution in the management of the local association and provides the association with the necessary funds for participating in the ownership of the Federal Land Bank of its district, since all the money received from farmer borrowers in payment of their stock must be invested forthwith in a like amount of stock of the Land Bank. The dividends received from the Land Bank enable a carefully managed association to pay all of its expenses and perhaps declare a small dividend itself, although the one per cent maximum margin between what a Land Bank pays its bondholders and what it receives from borrowers does not offer much prospect for net profits.

The original capital of the twelve Federal Land Banks, virtually all of which was obtained from the United States Treasury, has been repaid to the extent of ninety-eight per cent, so that for all practical purposes, the banks may be regarded as the sole property of the national farm loan associations.

In spite of an eighteen months' cessation of operations, while the question of their constitutionality was being taken through the courts, the land banks have made rapid strides. At the beginning of 1929 they had loaned 1.45 billions of dollars to 471,000 farmers on land and improvements appraised at over four billion dollars. More than three-fourths of the proceeds were used to pay off other obligations which had come due or had been incurred on less attractive terms. The rest went for the purchase of the local associa-

tion's capital stock or for the purchase and improvement of land.

The nine millions in capital stock of the Federal Land Banks furnish but an insignificant part of their actual working capital, inasmuch as they have availed themselves of the privilege of selling their bonds to the extent of more than a billion dollars. These obligations bear from 4 to 5 per cent interest, according to money market conditions at the time they were issued. They are secured by the whole aggregate of mortgages given by farmer borrowers all over the United States. Since a single standard bond is issued for all of the Federal Land Banks, and the Act provides that the rate charged borrowers shall not exceed the rate borne by the bonds by more than one per cent, the result has been the establishment of the same interest rates in all of the twelve districts.

While the farmer has undoubtedly profited by the reduction in interest which the tax-exempt farm loan bond has brought about, the whole practice of exempting securities from taxation is, nevertheless, open to serious question. To the extent that rich investors escape taxes by buying tax-exempt bonds, other tax payers are compelled to pay additional sums for the support of the state. Moreover, the exemption privilege militates against the securing of a well-balanced tax program based upon ability to pay.

In view of the distressing period through which agriculture has passed, and the laxity which characterized the management of several of the Land Banks, the volume of delinquent payments on their mortgage loans has not been large. There are but 4.3 millions of delinquent installments now on the books of the twelve Federal Land Banks, in addition to 15 million dollars' worth of farm land which the banks were compelled to take over in order to protect their loans. By judicious handling of this property they should be able, over a period of a few years, to recover the entire amount involved.

The same doubt as to the success of the coöperative credit idea, which prompted Congress to provide another kind of land bank that could be operated as a money making venture, caused the addition of local land bank agents to the machinery of the Federal Land Banks. For fear that a prospective borrower might be unable or unwilling to avail himself of membership in a national farm loan association, the law provided that a bank or a farm mortgage concern, acting as the agent of the Federal Land Bank of the district, could make a loan to him on behalf of the Land Bank. This device, however, has been productive of only a very small amount of business. Few banks or mortgage companies are willing to assume liability for the debt in return for the one half of one per cent commission specified by the Farm Loan Act.

The privately owned and operated system of joint stock land banks has also fulfilled the expectations of the sponsors of the Farm Loan Act, so far as their number and the volume of their loans are concerned. The privilege of issuing tax-exempt bonds to the extent of fifteen times their capital and lending the proceeds on the amortization plan has proved alluring to the promoters of these institutions. Some of them are adjuncts of commercial banks, while others have succeeded to the business of local farm mortgage enterprises. The forty-nine joint stock land banks which have survived the agricultural crisis have more than six hundred millions in loans outstanding. They have the advantage of ability to deal directly with the borrowing farmer. They are not liable for one another's debts and are not restricted to the six per cent maximum interest charge prescribed for the Federal Land Banks. However, as a matter of fact, they have been able to sell their several bond issues on such favorable terms that the spread of one per cent permitted between the bond interest and the rate charged borrowers has kept the latter at six per cent or less. Borrowers can obtain a maximum of

$50,000 [2] from the joint stock banks, as opposed to the $25,000 upper limit prescribed for the Federal Land Banks. This fact, together with the greater simplicity of the borrowing operation, has enabled them to compete with the coöperative system, in spite of interest charges which average about a half of one per cent higher. Unlike a national farm loan association borrower, the patron of a joint stock land bank is not required to cultivate the land he offers as security for his loan. This provision, also, has gained some business for the joint stock banks which could not be handled by the Federal System.

In the brief period since 1917, in spite of the enforced inactivity of 1919–21, when the Farm Loan case was before the courts, the two types of land bank have acquired a fifth of the total farm mortgage business of the United States. Their joint total is exceeded only slightly by the farm mortgage loans of the insurance companies. It seems quite likely that in the future the field will be dominated by these two sources of long-term farm credit. The insurance company, being the more conservative and at the same time able to lend without red tape, and at rates comparable to those offered by the land banks, will probably have the more select type of loans.

The market for joint stock land bank bonds has not been quite as favorable as that enjoyed by the Federal Land Banks. Since the former issue their securities independently, each issue must stand on its own merits. The fact that several of the joint stock banks have gone into the hands of receivers indicates the necessity for careful discrimination.

While the Federal Government was interesting itself in the credit problems of the farmer, a number of states were undertaking to improve their own mortgage credit situation by offering to lend public funds on farm land. A few of them,

[2] Banks with only the $250,000 minimum of capital stock required by law cannot lend more than $37,500 to any one borrower.

notably the two Dakotas and Minnesota, have created full-fledged state rural credit organizations. In their anxiety over the plight of farmers in their less-favored districts, these states erred on the side of liberality in drawing up the provisions of their laws, and the systems they created were administered in the same over-generous spirit. The result was that most of the loans were placed in sections where Federal Land Banks and insurance companies loaned very sparingly, or not at all. Later legislatures have done much to put their respective state credit systems upon a strictly business basis, but they are all more or less burdened with delinquent loans or with farms acquired from insolvent debtors. Minnesota seems likely to be able to wipe out her losses without imposing any burden upon the taxpayer, but her two neighbors are having a much more serious time. The country banks in the three states have been responsible for much of the patronage received by the rural credit system, inasmuch as it was to their interest to induce clients to obtain from the state the money with which to pay off frozen bank loans.

If the Federal Farm Loan System had not been created or if it had been forced to cease its operations permanently at the time its constitutionality was in doubt, there would be some justification for state rural credit systems; but now that an ample supply of credit has been made available by the former at very reasonable rates, no state has any compelling reason to project itself into the mortgage loan business.

While the long-term credit situation has not been rendered flawless by the changes effected by the Farm Loan Act, it has been decidedly improved. In the less-favored regions, loans are easier to obtain, interest rates are lower, and the terms of repayment are in keeping with the borrower's ability to meet them. Other agencies in these sections are still obtaining 8 or even 10 per cent, but this is due to the inferiority of the risk or ignorance as to the facilities afforded by the Farm Loan System.

The path of the Farm Loan System has not been a rose-strewn one. After its successful battle for its life in the courts, the agricultural depression was upon it. Values were reduced or even wiped out, and bankruptcy followed the extraordinary prosperity which the farmer enjoyed in the war period. Politics and nepotism, with their accompaniment of administrative laxness and inefficiency, honeycombed the land banks and the Federal Farm Loan Bureau. Three of the twelve Federal Land Banks and five of the joint stock banks recently have had to undergo complete changes in their management. In some of the joint stock banks, particularly, loans were made on lands not suited to agriculture at all. Appraised values were far too high. Farms by the score have had to be abandoned or have shrunk in market value to a point much below the amount of the loan.

Conditions within national farm loan associations, Federal Land Banks, and the joint stock banks alike have demonstrated a need for a much more thorough-going system of examination and supervision. Successive revelations of fraud, incompetency, and laxity have brought about some much-needed changes. The System as a whole, however, is in thoroughly sound condition and has demonstrated the practicability and soundness of its fundamental features.

The artificial uniformity of interest rates for all of the twelve districts is offensive to the critical economist, because of his belief that the risks in the rich corn belt of the Middle West, for example, are not the same as those in a semi-arid section of the trans-Missouri region. What it amounts to is that the artificially low rate accorded the farmers in the latter areas is a subsidy provided (1) by the victims of the tax exemption feature of the System's bonds, and (2) by the borrowers in the richer agricultural areas whose better security is diluted, so to speak, by admixture in a common mass of mortgages which form the collateral back of the Farm Loan bonds. If each district issued its bonds independently,

the bonds of well-favored agricultural areas would command a better price than the average represented by the price now obtained for the joint offerings of all twelve banks.

One of the weakest spots in our whole farm mortgage structure is our system of appraising the value of land. The old-fashioned guesswork is a poor basis upon which to base a bond issue intended to enjoy the choicest market and most favorable terms. Extensive research into the fundamental causes of differences in land values should be undertaken and systems of appraisal built upon them.

The present universal practice of restricting loans to one-half of the value of the land is an acknowledgment that there is a large element of error in land appraisal. If valuation of land could be put upon a scientific basis, more liberal loans could be granted to better risks, and the financial barrier which exists between tenancy and ownership would be lowered materially.

The second mortgage situation is still in as unsatisfactory a state as ever. The high cost of acquiring a good farm makes it imperative that many purchasers obtain a considerably larger grant of credit than can be had on the first mortgage. The Federal Farm Loan Act taboos the second mortgage, and many states forbid the banks under their jurisdiction to invest in them. Since this instrument plays an important part in modern farm finance, more satisfactory provision should be made for it. The rates are very high and the market limited. Private lenders are, at present, one of the chief outlets. There is much to be said for the establishment of a second mortgage department of the Federal Farm Loan System until such time as appraisal can be put upon such an accurate basis that as much as three-fourths of the value of the farm could be loaned safely upon the first mortgage. The debentures of a carefully operated second mortgage department would have to bear a higher rate of interest than that enjoyed by the first mortgage bonds, but should

have as good relative standing as the junior liens of business corporations, which means that the second mortgage interest rate would be considerably reduced.

For tenants of a low degree of ability and energy, and for land owners who persist in undertaking to raise grain or cotton on land unprofitable for agriculture under normal price conditions, no soundly operated credit system will be of much avail. They are simply not proper business risks.

3. The Federal Reserve Act and Agriculture

One of the important objectives in Federal Reserve legislation was the elimination of the recurring seasonal shortages of money and credit which accompanied the spring and fall operations of agriculture. The generous rediscount facilities of the Reserve Banks were made available to rural member banks and their agricultural and livestock paper were given a six months' rediscount period, as opposed to the ninety-day limit imposed upon the notes and drafts of industrial and commercial firms. Later on (1923), the rediscount period for farm paper was extended to nine months.

From the very start, the Federal Reserve Board interpreted the agricultural provisions of the Act with the utmost liberality. Any use of the proceeds of a farmer's note which could be interpreted as "agricultural" made the note eligible for rediscount, even if the money were invested in semi-permanent equipment like farm machinery.

Likewise, in the field of animal husbandry, the eligibility of livestock loans was not confined to self-liquidating projects like the fattening of "feeders" for market, but was made to include expenditures for draft and dairy animals as well.

The coöperative marketing movement has also been a beneficiary of the Reserve System's liberal attitude toward agriculture. Drafts drawn against one of these organizations by

its members can be rediscounted by a member bank up to a fourth of its capital and surplus, and notes growing out of the financing of members' seasonal needs by a coöperative are accepted by the Reserve Banks, in spite of lack of evidence as to the agricultural purpose of the expenditure.

As we saw in the discussion of bankers' acceptances, their use in the financing of agricultural marketing has placed at the disposal of agriculture the resources and rates enjoyed by urban business. Our figures covering the commodities represented in the bank acceptance holdings of the Reserve Banks showed that paper drawn against farm products constituted the greater part of the total. Thus, in its efforts to place the Federal Reserve facilities at the farmer's disposal, the Board has departed radically from the conception of self-liquidating transactions which formed the original foundation for the System's rediscounting operations.

In an earlier chapter mention was made of the fact that in 1922 an additional appointive member was added to the Reserve Board with the understanding that he should be a representative of the agricultural interests of the country. No doubt the advice and judgment of a man well-versed in the peculiar problems of a given business are of great value to an administrative and quasi-judicial body like the Reserve Board, but that is not the principle upon which bodies of that sort should be constituted. When a government board or commission requires expert advice in a given line, it not only has at its disposal all of the resources of the particular department concerned, but is free to summon the ablest specialists from outside of government circles. Since there are some fourteen distinct types of occupation embraced in the term agriculture, it is asking a good deal of one man to expect him to bring expert knowledge to the Board with respect to every type of agricultural pursuit. If this basis of selection were carried to its logical conclusion, there would need to be several hundred members on the Reserve Board—one for each

field of activity represented in the discount operations of the System.

As we have noted, the failure of most of the eligible state banks to enter the Reserve System was distinctly disappointing to those who expected agriculture to receive a generous outpouring of the System's bounty through the rediscount operations of country banks. Indirectly, the non-member country bank reaps the benefit, as we have observed in our discussion of the crisis of 1920, when city banks rediscount their paper at the Federal Reserve Banks in order better to accommodate non-member correspondents.

Aside from the benefits conferred upon rural banking through the rediscounts of the urban or country member bank, the functioning of the Reserve System with its elastic issues of paper money, its machinery for facilitating interregional transactions, its creation of a broad discount market, and its influence in the direction of general stability, has been of great benefit to agriculture.

Had it not been for the momentous agricultural crisis in 1920, it is likely that the Federal Reserve and National Banking Acts, with minor modifications from time to time, would have been deemed sufficient to provide for all but the poorest credit risks among farmers, especially as far as agriculture proper was concerned. The machinery for financing the livestock industry was still far from satisfactory, as we shall see later, but the country banker aided by his city correspondent or the Federal Reserve Bank of his district was providing liberally for the financial needs of the crop grower.

The tragic collapse of prices in 1920 was followed by a partial paralysis of the whole machinery of short-term credit in our rural areas, in spite of a liberal inpouring of funds from their Reserve Banks and other outside sources. As a result of this condition, the whole mechanism of supplying short-term credit to agriculture was again subjected to searching examination.

The friends of the farmer in Congress demanded that the fullest consideration be given by that body to the existing plight of agriculture. A Joint Commission of Agricultural Inquiry was created, in 1921, for the purpose of finding out the causes of and remedies for the situation in which the farmer found himelf. The Commission in its findings recognized that the crying need of agriculture was not more credit but better markets and marketing machinery, lower production costs, and a better coördination of the supply of farm products with the ability to dispose of them at a reasonable profit. They did, however, attach some of the blame for the price collapse to the following alleged deficiencies in the credit structure:

First, the typical country bank was too small to care adequately for the needs of its constituency. Many more of them should have joined the Reserve System and been able to draw upon that sure source of emergency aid. As a result of this criticism, it will be recalled that Congress amended the Reserve Act to permit rural banks with as low as $15,000 of capital to join the System, provided they proceeded to increase this amount to $25,000 by applying twenty per cent of their net income to this use. But, as we have observed, this effort to extend the System's usefulness has been of little avail.

Second, much of the deplorable condition of the farmer and stock breeder could be traced to the severe restrictions of our banking laws and regulations with regard to the maturity of loans. The breeding and growing operations of the stockman frequently involve periods of two or three years, while a lapse of time almost as great exists between the initial operation of contracting for fertilizer and the actual sale of the crop. True, livestock companies had been providing the kind of credit arrangements needed by the stockman, but the crisis had left the business in a most deplorable condition. Country banks had been liberal in their renewals

of grain growers' notes in order to see them through the entire process of planting, growing, and marketing. In the opinion of the Commission, however, special intermediate credit banks were needed: (1) to relieve the regular so-called commercial banks of the necessity of tying up their funds for such long periods, (2) to deliver the farmer from the necessity of ever being forced, by the calling of a loan, to sell his crop at a disadvantage, and (3) further to reduce the rates paid by farmers for this intermediate type of credit.

These indictments of existing practices and facilities led to the creation of a Federal Intermediate Credit System and the further liberalization of the provisions in the Federal Reserve Act which deal with agriculture.

4. The Federal Intermediate Credit System

Between the receipt of the report of the Joint Commission of Agricultural Inquiry in 1921 and the enactment of the Federal Intermediate Credit Legislation in 1923, Congress devoted much attention to finding out just what the farmer and cattle man wanted in the way of further credit machinery. Lengthy hearings were held, but, at the end, there was still marked difference of opinion as to what should be done. The large coöperative marketing associations would have been content with the extension of the rediscount period to nine months and the recognition of their activities as agricultural. A similar position was taken by the feeders of livestock. For the most part, however, the farm organizations insisted that a new system of rural credit banks was needed to provide for those operations which covered from six months to three years. As happened in the case of the Farm Loan Act, alternative proposals could not be reconciled; so leading features of both were thrown together into a last-minute compromise measure, and passed under the name "Agricultural Credits Act." Conservative proposals calling for modifica-

tion of existing facilities were linked with a more radical plan of setting up an entirely new chain of credit institutions.

Since we have already discussed the conservative proposals in our analysis of changes in the Federal Reserve Act, we can proceed with an examination of the salient features of the more radical plan. In order to reduce to a minimum the multiplication of machinery, the twelve new Intermediate Credit Banks were attached to the twelve Federal Land Banks and placed under the jurisdiction of the Federal Farm Loan Board. Unlike the Land Banks, however, they are strictly a government-owned enterprise. The Treasury supplied the initial capital of two millions to each bank, and is required to furnish up to three millions more if it is needed. No provision was made for taking the Government out of the banking business, by the gradual transfer of stock to borrowers or by any other device.

By the end of 1928, slightly more than a quarter of a million dollars had been paid into the Treasury as its share of the banks' net earnings, but it would be better, even if this becomes a substantial return upon the government's investment, to divorce the Treasury from business. The clientele of the banks is so varied in character, however, that a member ownership plan would not be as feasible as in the other two Federal banking systems.

The Treasury's contribution was intended merely as a "nest egg," for each of the banks has several other sources of funds. First, it can sell its debentures, of one month to three year's maturity, up to ten times its capital and surplus. Since these obligations are liquid and tax exempt, they have commanded a rate of interest varying from 4¼ to 5 per cent. They are secured by a deposit of the paper of farmers and livestock men and the Farm Loan Board has absolute control over the amount any of the banks can offer for sale. In addition, all twelve of the banks are jointly liable for the debentures issued by any one of them. Second, they

may sell on the open market the acceptances and notes they have rediscounted for borrowers or they may rediscount them with a Federal Reserve Bank, but because of the inflationary possibilities inherent in this privilege, certain safeguards have been thrown about it. After all, the chief value of the rediscount privilege to an Intermediate Credit Bank lies in its ability to obtain temporary working capital from a Reserve Bank, pending the sale of debentures to the public.

Individual borrowers cannot deal directly with the Intermediate Credit Banks. The funds of the banks must come to a farmer or stockman through some intermediary such as a coöperative marketing association, a livestock loan company, a bank, or an agricultural credit corporation.

A note or draft, the proceeds of which a farmer employs for any agricultural purpose, can be sold to the intermediate credit bank through one of the agencies just listed. Coöperative marketing associations which in the past had found that advances from commercial banks were inadequate in amount and unsuited in terms to their special needs, were given the privilege of pledging products received from members for direct loans up to seventy-five per cent of the market value of the pledged produce. The coöperatives are thereby enabled to make liberal advances to members and at the same time do not have to hurry the marketing process in order to get money. Since coöperative marketing organizations, as a rule, have no capital stock, they are not permitted to endorse their members' personal notes and rediscount them as a bank or credit corporation can do.

In addition, then, to the more than a billion dollars in capital which the land banks have brought to agriculture from the investing public, and the huge reservoir of credit made available for seasonal needs through the Federal Reserve System and the bankers' acceptance market, the Intermediate Credit Banks offer to the farmer and stockman a third direct connection with our central money markets.

Thus far, the use made of the facilities of the Intermediate Credit Banks has been disappointing to their sponsors. From the date of the System's inception to the first of January, 1929, the Banks had advanced to agriculture a grand total of only three-quarters of a billion dollars, and had outstanding on the latter date but 45 millions in loans and discounts —an insignificant figure for a nation-wide organization, especially when one views the figures of a single large city bank or trust company. It indicates that the farmer and live stock grower are still being financed largely from the old sources of intermediate credit.

There is one source of gratification in the modest figures we have quoted, viz., that the Federal Farm Loan Board's insistence upon decent standards from the very start has been a factor in the case. When commercial banks in stricken agricultural areas, immediately upon the inauguration of the System, sought to use it as a dumping ground for frozen or worthless farm paper, they were promptly turned away. In all of the Board's actions with reference to the Intermediate Credit Banks it has exercised a commendable caution, although, at the same time, it has incurred criticism for not displaying constructive leadership in promoting the fullest legitimate use of the System's facilities.

National and state banks as such have made only insignificant use of their right to rediscount eligible paper with Intermediate Credit Banks. The law restricts their offerings to twice the amount of their capital and surplus, whereas by organizing a subsidiary agricultural credit corporation, as described below, they can extend this limit to ten times the credit corporation's capital and surplus. Many of the credit corporations formed have thus been the adjuncts of existing banks. However, the small spread of one and one half per cent [3] permitted between the rate charged the farmer bor-

[3] In 1924 the Farm Loan Board increased the spread to 2 per cent on live stock loans.

rower by a bank or its auxiliary corporation and the rediscount rate of the Intermediate Credit Bank has not proved attractive to bankers. They insist that they cannot set up proper reserves against losses and have any considerable amount left for profit.

Inasmuch as a country bank, in rediscounting with its Reserve Bank or city correspondent, is not restricted with respect to the rate it shall charge a borrower, it has continued to do its borrowing from these sources, with the exception of limited funds it has obtained through an affiliated credit corporation or livestock loan company. For the most part the more recently formed credit corporations have been entirely independent of commercial banks or trust companies.

The agricultural credit corporation has become the major lending agency of the Intermediate Credit System. It is chartered by a state but is supervised by the Federal Farm Loan Board. The small credit corporations suffer from insufficient capital and poor management, so that it can readily be seen that their endorsement of farm paper would have little value, nor do they possess the requisite financial strength to shoulder losses. On the other hand, the few strong credit corporations now in existence have fully demonstrated the value of this new type of agency.

Our financial system is already overloaded with undersized banks, and it would merely serve to weaken them still further if we encouraged the formation of numerous competing credit corporations. The justification of a limited number of the latter is their ability to supplement existing facilities where rates are abnormally high or to provide a type of credit that is needed in some area but is not now available.

The most promising field for the use of the credit corporation is in connection with coöperative marketing. As auxiliaries to the coöperatives, they can be made to supplement the supply of bank credit. As we noted, a coöperative can borrow on the produce it owns by pledging it with an Inter-

mediate Credit Bank, but it can use much additional money to advantage in financing the crop-growing operations of its members. In the South particularly, the existing system of store credit needs to be supplemented by large credit corporations, either with the affiliation we have just described or operated as independent enterprises, provided the latter can attract adequate financial backing.

Brief mention has been made of a provision for privately owned intermediate credit banks in the Agricultural Credits Act. These enterprises were styled National Agricultural Credit Corporations and were intended to bear somewhat the same relationship to the Federal Intermediate Credit Banks as the joint stock land bank bears to a Federal Land Bank. Two types were provided: the smaller companies were designed to serve as a sort of national banking association for the livestock industry, while those with a million dollars or more capital could rediscount paper for other credit corporations or for members of the Federal Reserve System. At first they were entirely divorced from the functioning of the Intermediate Credit System, but in 1925 Congress provided that they could discount paper with an Intermediate Credit Bank. Only three National Agricultural Credit Corporations were formed and two of them have gone out of existence. The sole survivor is making loans on livestock in the San Joaquin Valley in California. The difficulty has been that in its efforts to safeguard the operation of such enterprises, Congress made them unattractive to the average group of private investors. The minimum of $250,000 capital stock, the careful restrictions thrown about their lending operations, their heavy reserve requirements, all account for the failure of livestock loan companies and other groups to adopt this form of organization. With much more liberal state provisions for organizing a credit corporation, and with the facilities of the Federal Intermediate Credit Banks open to the state credit corporations and to the livestock loan companies,

it seems unlikely that the national corporations will have any further development.

In spite of the array of institutions available, a satisfactory solution for the livestock loan problem has not yet been reached. The banks in these areas where livestock growing predominates have not had the resources to supply the large sums required by this industry as it is carried on under modern conditions. As a result, supplementary agencies in the way of livestock banks and cattle loan companies came into being. The additional money needed was provided by the packers and eastern bankers through these intermediaries. In spite of the gradual introduction of modern credit methods, the scarcity of funds and the heavy risks attached to the business have kept interest rates at the high level of 8 to 12 per cent. Furthermore, since most of the paper bore the traditional six months' maturity date, it had to be renewed from one to five times.

In the period from 1917 to 1920, the cattle business was so overstimulated that new loan companies came into being with great rapidity, and credit standards were greatly relaxed, both with respect to the ranges and the feeding operations carried on by corn belt farmers. The whole industry had been built on credit to such an extent that when bankers began their policy of contraction in 1920–21, complete demoralization ensued. The War Finance Corporation and other emergency agencies rendered all the aid they could, but the cattle and sheep businesses are just now regaining their former state of well-being (1929).

The way out of the difficulty in which livestock finance finds itself lies not in the creation of any more credit agencies but in the improvement of what we already have. Lending methods in the industry are capable of much improvement in the direction of credit analysis, the use of insurance against the insurable hazards of the business, the more definite specification of the security back of the loan, and a strict regard

for the trends in prices and production. Cattle loan companies should be subjected to the same careful regulation and supervision as is applied to our national banks. They have made relatively little use of the admirable facilities of the Federal Intermediate Credit Banks, their total of 23.7 millions in rediscounts at the twelve banks, on January, 1929, being less than one large cattle loan company had outstanding in prosperous times. The restriction of the margin between the Intermediate Credit Bank rate and the rate charged borrowers to 2 per cent, and the regulation to the effect that they must sell all or none of their paper to the Intermediate Credit Bank, have led them to accept the latter alternative in most cases.

Given the removal of these restrictions and the placing of the cattle loan companies and, in fact, the whole livestock business upon a sound, well-regulated basis, an ample supply of credit would be assured at moderate interest rates and liberal maturity dates.

The fact that the Federal Intermediate Credit machinery has not gone ahead at full speed, in the six years in which it has been in operation, is not proper grounds for its condemnation. A great field of usefulness lies ahead of the System: (1) in financing coöperative marketing associations, (2) in placing livestock credit upon a stable and adequate footing, and (3) in affording relief to individual farmers who are still paying unreasonably high rates for credit, by fostering the establishment of agricultural credit corporations of adequate size and financial strength.

5. The Present Agricultural Credit Situation

It is now generally conceded that so far as the mere matter of banking machinery goes, the farmer has been well supplied with credit relief. Every type of capital need has been met. There remains to be accomplished the strengthen-

ing of individual credit risks and of individual farm and livestock loan enterprises, and some modification of detailed regulations. Country banks, farm loan associations, agricultural credit corporations, and cattle loan companies need to be placed upon a sounder and more business-like basis. Politics and nepotism in the supervision and administration of all farm credit institutions need to be eliminated completely and permanently. Steady effort is required to improve the individual credit standing of farmers and cattle men. Most of them do not follow the most approved methods of agronomy or animal husbandry, not to mention their serious deficiencies as business managers. Improvement along these lines must of necessity be gradual, but the progress already made is decidedly encouraging. Many farmers are still paying too much for borrowed capital, but it is because they have refused to avail themselves of the resources of our recently instituted credit systems, or because facilities for connecting them with the new supplies have not been provided in some localities.

With all of this gift of credit facilities which has been lavished upon him since 1913, the agriculturist still faces a serious financial situation. Under the tutelage of agricultural experts he has increased his production at a rapid rate. In addition, railroads and "booster" organizations have induced large numbers of city dwellers to take up farming. As a consequence, certain lines of agriculture are distinctly not profitable. It is, therefore, to questions of production control, price stabilization, and the disposition of exportable surpluses that our legislators are devoting their attention, after more than a decade of wrestling with the intricacies of agricultural credit.

B. Monetary and Banking Policy as Related to Borrowers for Non-Productive Purposes

1. The Small Consumptive Loan Problem

It is estimated that several millions of our adult population neither have any money on deposit in banks nor could they obtain a loan from a regular bank. The very large total annual demand on the part of such persons for loans of from one dollar to several hundred for so-called consumptive purposes has, therefore, to be met by other agencies.

Since in times past the supplying of such a need has been regarded as beyond the pale of respectable finance, the salaried and wage-earning classes who were too proud to make demands upon charity and could not obtain help from friends or relatives turned to less desirable agencies. Hence there arose the loan shark and the pawnbroker to supply their urgent needs. A fair percentage of the loans obtained from such sources is undoubtedly spent for vicious purposes, but most loans are for a legitimate object and are contracted not by thieves and prodigals but by respectable clerks, factory employees, firemen, policemen, and teachers.

The pawnbroker has long been regarded as the ally of the burglar and highwayman, and with some reason, but with the careful daily supervision maintained by our better governed cities the use of the pawnshop as an outlet for stolen goods has been greatly reduced. The unfortunate worker who must pledge his watch or set of tools in order to meet an urgent need for money is the pawnbroker's real reliance.

In order to evade the usury laws of his state, the pawnbroker "buys" the article offered as security, under an agreement to "sell" it back to the owner within a certain time and at a considerably higher price. Where the small loan business has not been subjected to strict regulation, the

broker's "profit" from the fictitious sale amounts to several hundred per cent per annum.

Loan sharks are of two general types: those who lend to a wage or salary earner on an assignment of his pay envelope, and those who take a chattel mortgage upon one's automobile, furniture, or other effects. In both cases the contract is drawn in such language that there appears to have been a sale rather than a loan. Not only have the charges of the loan shark and pawnbroker been exorbitant, but the whole business has been tainted with fraud and other unsavory practices.

Beginning in the 1890's, a concerted attack was made upon the evils associated with the consumptive credit problem. Metropolitan newspapers exposed the situations in their respective cities. Provident loan societies were formed by philanthropically inclined wealthy citizens for the purpose of competing with the pawnshops. The Provident Loan Society of New York, since its organization in 1894, has loaned considerably over a half billion dollars upon personal property. Of this more than ninety-nine per cent has been repaid. The interest charge of one per cent per month sounds excessive, but the expense per dollar of loans made is much greater than that of a bank. The only disbursement made aside from operating expenses is the going rate of interest paid upon the certificates of contribution which furnish working capital to the Society. In 1927 alone, nearly a half million separate loans were made, ranging from a dollar to more than a thousand dollars, the average being about $88. These facts indicate very clearly how necessary it is that decent facilities be maintained for the small borrower.

The Remedial Loans Division of the Russell Sage Foundation has directed a concerted legislative attack upon the extortionate practices of the loan shark. Largely through the Foundation's efforts, a uniform small loans act has been widely adopted in the United States. Many disreputable

money lenders have been driven out of business, while others have placed their dealings upon a respectable basis. The 3½ per cent per month which the model law permits seems unjustifiably large, and yet the Foundation's experts insist that the loan brokers cannot make a fair living on any less. The semi-philanthropic enterprises like the Illinois Pawners' Societies and the New York organization we described have made serious inroads into the pawnbrokers' business, but there are still numerous persons who shun the atmosphere of a more genteel loan establishment.

In addition to the philanthropic but self-supporting remedial loan societies just considered, another institution has arisen which is frankly operated for profit, although it too is aimed at the abuses we have discussed. In 1910, Mr. J. Arthur Morris, a Virginia lawyer, put into operation in Norfolk a type of banking devised to suit the needs of the better class of small borrowers. Morris plan banks, as they are called, have since been established in more than a hundred American cities. The essential features of the plan are: (1) that the character and earnings of a borrower and the two friends whom he is required to secure as endorsers of his note, shall be the sole basis of loans; (2) that instead of paying back a lump sum the borrower has the privilege of spreading his payments over fifty weeks; (3) that loans must be devoted to a useful purpose.

The capital of a Morris plan bank is provided partly by local stockholders and partly by a "mother" organization, the Morris Plan Corporation. The latter, however, owns in the aggregate but a fourth of the capital stock of the banks. In nearly every case the directorate is made up of leading citizens who are more interested in the cause of the small borrower than in the 4 to 8 per cent dividends which the banks are paying on their capital stock. Additional funds are procured by selling paid-up investment certificates and instalment certificates used by a borrower in accumulating the

weekly payments for the discharge of his debt at the end of the fifty weeks. The parent organization, in addition to buying stock in new banks, assists in their organization and early months of operation. Thereafter it furnishes such legal and other advice as the banks care to seek.

So far as the Morris plan itself is concerned, it has demonstrated both its soundness and its capacity to render valuable aid to the cause of consumptive borrowing. The chief criticism against these banks is that their charges are too high. A person borrowing $100, for example, is charged $6 interest and a $2 investigation fee in advance. He thus has the use of but $92—and that for but one week—for he must begin repaying his loan at the rate of $2 each week. As a result, he pays at the rate of some seventeen per cent for accommodation. The stockholders of the Morris plan banks, however, in spite of quite uniformly capable administration, have not made more than a normal rate of return upon their investment. As is the case with the provident loan societies, the small sums involved require much more bookkeeping and administrative expense than a large commercial bank loan. The losses do not average any more than those of ordinary banks, but a higher rate is paid on savings as represented in the banks' investment certificates.

Very recently, several large city banks have opened small loans departments operated upon lines similar to those followed by the Morris plan institutions. With their large volume of business and consequent wide distribution of overhead expense, they should be able to reduce the cost of this type of accommodation.

No less important than the provision for the credit needs of the small borrower is the supplying of safe and productive ways of accumulating and employing his savings, in case he is sufficiently thrifty and fortunate to be able to save money. The Morris plan banks, and the building and loan associations whose activities we shall consider presently, are offering

more attractive rates on savings than those paid by ordinary banks, but not so great freedom is granted with respect to withdrawals.

In order to attract the hoardings of timid foreigners from hiding places, the United States, in 1910, inaugurated a postal savings system. In framing the necessary legislation Congress was a bit too concerned lest the banks suffer from the competition of the postal system. Consequently, the absurdly low rate of 2 per cent was prescribed, no interest can be paid for less than a year, and no sum over $2500 draws interest. As a result of these restrictions hoarding has been little reduced. The record of bank failures and financial swindles has been enough to frighten the timid and untutored away from banks, but they should not be penalized to the extent of 33 1/3 to 50 per cent because of their distrust of privately owned savings institutions. Government savings banks in Canada pay the going rate of interest without seeming to injure the privately owned organizations.

Organized labor is recognizing to an increasing degree the need of its members for the two-fold service of lending and investment. The Amalgamated Clothing Workers is an outstanding example of a single union which provides loans through its own bank at low rates of interest and, through an admirably managed investment department, secures a high return upon its members' savings. Other labor banks serve all of the trade union members in a given locality, while still others, like the railway brotherhood banks, were started primarily for the benefit of a given occupational group.

In all of the labor banks, the non-propertied worker is accorded much more generous treatment than he would receive at an ordinary bank. Some of these institutions share their profits with depositors, while others sell stock both to the union and its individual members. The labor bank not only affords an attractive banking connection for the union worker but enables the organization to keep its funds where

they draw a higher rate of return and are not in the hands of bankers whose interests are identified with those of the employing class.

Not all of the financial ventures of organized labor have been wisely administered. As a result some of them have come to grief or have been so unprofitable as to prompt their sale to private groups. Fortunately no major disturbance has occurred in any of the unions concerned since they have undertaken to operate banks. In case a long drawn out strike occurs, one wonders how far the management of a labor union bank would go in devoting the policies and resources of the institution to the cause. Since the labor banks are under either national or state banking authority, they would of course be subject to the restrictions imposed by law.

Since the middle of the nineteenth century, both urban and rural workers in Europe have had the opportunity of meeting their credit needs through coöperative societies. At about the same time, Schulze-Delitzsch, in the town, and Raiffeisen, in the rural community, organized the first credit unions. The idea spread through Europe, but like all coöperative ventures it failed to take root in the United States until some twenty years ago, when it was introduced into New England by French Canadians. Shortly thereafter Mr. J. S. Hill, a member of the United States rural credit commission of the Taft administration, introduced the same plan among the small farmers of North Carolina. Under the leadership of a national extension bureau supported by wealthy private citizens, credit union laws have been enacted by a number of state legislatures.

In order to have the necessary cohesive element, an individual credit union confines its activities to a group which has some common bond, as for example, the postal employees of a city, the workers in a given plant, the members of a church parish, or some particular racial group. Except in isolated cases, the loanable funds are accumulated by the members

themselves. The profits earned are distributed among the membership according to the number of shares owned. Even the smallest loan may be paid back in a number of instalments, and weekly membership payments of as little as ten cents a week are accepted.

The security required by a credit union of a borrowing member is his pledged shares, together with evidence of good character and satisfactory employment status, and, in some cases, the endorsement of one or more fellow members. Wherever a state legislature has imposed substantial money requirements for admission, credit unions have not thrived. They are essentially the organization of the person of small means. The parent union on this continent—one at Levis, Quebec—started with a total of $26 and now has well over a million dollars in resources. The credit unions in large New England business establishments have acquired comparable size and strength.

In the South, the development has been largely among the rural population. In North Carolina, where the movement has made the greatest progress, farmers who have been the victims of the trade credit system are borrowing from the unions at 6 per cent. In addition the union is selling them fertilizer and other supplies at substantial reductions.

The model law adopted with modifications in more than a score of states provides for adequate supervision by the state banking authorities. The large unions have adequate resources and sound management. The difficulty, as is the case with small banks, farm loan associations, and other similar enterprises, lies in the lack of managerial talent and financial backing from which the small union is apt to suffer.

It should be made clear that the labor banks, Morris plan institutions, and credit unions do not exist solely for nonproductive borrowing purposes. Small farmers, merchants and others who patronize one or another of these credit

sources frequently have a definitely productive purpose in mind.

2. The Home Building Loan Problem

The man of slender means who desires to buy or erect his own home is confronted by an array of credit sources comparable to those from which the present-day farmer is permitted to choose. If he can make only a small down payment, he will negotiate with the seller or some other private individual for a "contract for a deed," and when half or more of the principal sum is paid he will be able to acquire title and give back a mortgage for the unpaid balance. If he has in his possession sufficient funds to cover half of the cost, banks, insurance companies, and private lenders are always at hand to supply the rest. The building and loan association, however, offers him a more liberal arrangement. It will advance, on an average, about two-thirds of the value of the house and lot and will spread the obligation over a series of a hundred or more monthly payments.

The building and loan association movement has gone through a most interesting evolution and after virtually a hundred years of development is still undergoing radical changes. It began in 1831 as a neighborhood club, the members of which desired to build homes, accumulating the necessary funds by paying equal amounts into the club treasury. The monthly accumulations were loaned to one member after another until all had obtained their homes. Whereupon the association disbanded.

The desire on the part of certain individuals to build more or less expensive homes than the average caused the introduction of a share plan so that different members could borrow different amounts, each maturing by monthly payments a sufficient number of shares eventually to cancel his loan.

The constant appearance of new groups of prospective home-owners brought about a second marked change. In-

stead of the association terminating with a single group of borrowers, the serial idea was introduced whereby new groups were admitted to the same association periodically. This plan is still widely used, but many associations follow what is known as the permanent or Dayton plan which permits members to join individually at any time they see fit.

Not only has the building and loan association been relatively more attractive to home builders but because of the much higher rate paid on the deposits of non-borrowers it has attracted large sums which would have been invested in securities or left in a savings bank. The withdrawal of such money was formerly hedged about with severe restrictions, but in many associations today even a thirty-day notice requirement is waived for ordinary sums.

The modern building and loan association is gradually becoming a sort of mortgage bank which receives deposits at all times and in any amount and lends them on the security of homes, on an easy payment plan. The old proceeding of maturing shares over a series of years in order to meet the face of the loan, together with that of compelling an investing member to wait until his series matured before he could withdraw his money, is passing.

At present most associations are still mutual and independent but, in the less conservative West, the branch movement is growing, as is also the guarantee capital type of organization, in which individuals organize or buy associations for the purpose of obtaining the net profits after a fixed sum is paid depositors just as they would do in an ordinary bank. It is difficult to see how the old borrower-owned local type of association can fail to lose ground before a chain of associations or strongly financed individual capital stock organizations.

Compared with the record of state and national banks, the losses suffered by building and loan association failures have been insignificant. Most of them occurred in a period of

over-expansion at the close of the last century. Since then there has been a steady improvement in the standards of association practice and of state supervision, in spite of a very rapid growth in the movement. The oversight of the building and loan associations is usually vested in the state banking department, but in a few of the states the volume of business is so large that a separate superintendent and department are necessary. Only a few states have as yet adequate codes governing the operation of building and loan associations. In the others, the good record made by their associations is therefore not due so much to the efficiency of the regulatory system as it is to the honesty and good judgment of the persons who were responsible for the management.

As was said of the farmer, the non-productive borrower now has adequate sources of credit. What is needed is the improvement of the individual risk and the maintenance of high standards in the conduct of the several types of credit institution and in the public offices responsible for their supervision.

BIBLIOGRAPHICAL NOTE

In her book, *The Farmer's Campaign for Credit* (New York, 1927), Clara Eliot has given a very convenient and complete summary of the farmer's monetary and credit problems from our early history to the present time.

Ivan Wright, in his two books, *Farm Mortgage Financing* (New York, 1923), and *Bank Credit and Agriculture* (New York, 1922); and J. B. Morman in *Farm Credits in the United States and Canada* (New York, 1924), deal intensively with the problems of the present-day farmer and the credit legislation which has been enacted in his behalf.

A. G. Black in the *Quarterly Journal of Economics* for November, 1928, has brought the history of farm credit situation down to date and made many constructive suggestions. The annual reports of the Federal Farm Loan Board give an excellent year to year account of the Farm Loan System's progress, and frankly discuss its shortcomings.

A wealth of material exists in documentary form. *The Report of the Business Men's Commission on Agriculture* (New York and

Washington, 1927), gives an impartial non-political point of view. The hearings before the Senate Committee on Agriculture, 63d Congress, 1st Session; and the 67th Congress, 3d and 4th Sessions, together with the investigation of the House Committee on Banking and Currency, 67th Congress, 3d and 4th Sessions, and the Report of the Joint Commission of Agricultural Inquiry, Part II, *Credit,* constitute a mine of information and comparative viewpoint.

F. W. Larmer, *Financing the Livestock Industry* (New York, 1926); C. L. Benner, *The Federal Intermediate Credit System* (New York, 1926), and Herman Steen, *The Financing Problems of Cooperative Associations,* in *American Cooperation,* Volume II, deal with important special phases of the rural credit problem.

In the small loans field the several aspects of that business are covered in P. W. Herzog, *The Morris Plan of Industrial Banking* (Chicago, 1928); R. F. Bergengren, *Coöperative Banking* (New York, 1923), and in the reports of the remedial loan societies and the Remedial Loans Division of the Russell Sage Foundation.

H. F. Clark and F. A. Chase, in their *Building and Loan Associations* (New York, 1925), have written the only comprehensive treatment of the building and loan movement in America.

H. G. Moulton, *Financial Organization,* and R. B. Westerfield, *Banking Principles and Practice,* present brief but well-rounded surveys with respect to loans for non-productive purposes.

R. Boeckel, *Labor's Money* (New York, 1923), and The Industrial Relations Section's *The Labor Banking Movement in the United States* (Princeton University, 1929), describe the various problems and policies of labor banks.

CHAPTER XII

NATIONAL INTERRELATIONSHIPS IN MONETARY AND BANKING POLICY

In the course of our discussion of numerous individual aspects of American monetary and banking policy we have had occasion frequently to contrast American practice with that of one or another of the leading foreign countries. There is still need, however, for dealing with this subject in a somewhat more orderly and connected fashion, in the hope of ascertaining: (1) the extent to which important financial problems are attacked in the same or in a different way, and the reasons therefor, and (2) to what degree, if at all, it is desirable to subordinate strictly national considerations to international well-being in the formulation of financial policies.

1. Comparative Banking Policy

As we have already observed, our banking background was essentially British. The colonies tended to transplant the institutions and customs of England, but our vastly different economic environment resulted in marked departures from the English financial organization. It was only when a sizeable volume of business developed in colonial cities and towns that British commercial banking methods could be applied successfully. During the nineteenth century, while our conception of commercial banking was essentially Brit-

ish, our financial structure continued to develop along different lines.

During the present century, we have shown a creditable disposition to study closely the financial institutions and practices of the other nations and to pattern after features which seemed to meet our needs. We have observed, for example, how European ideas were copied freely in reforming our commercial banking structure in 1913, and in framing our agricultural credit legislation of 1916 and 1923. Canada and European nations have not been as ready to imitate us, although the Canadians have manifested a deep interest in our methods of bank regulation, the workings of the Federal Reserve System, and solutions for the credit problems of agriculture. Some few features of the numerous central banking projects enacted since the war were undoubtedly inspired by our Federal Reserve Act.

All countries owe their common conception of the cardinal banking functions, discount, deposit, and note issue, to the British goldsmith-banker. Bills of exchange, promissory notes, and other credit instruments, it is true, have been in use since the earliest civilizations, but such so-called banks as existed before the late seventeenth century did not perform essential modern banking functions. By 1694, English trade had developed to a point where there was needed a much more resourceful institution than these small private firms. This was supplied by the granting of a charter to the Bank of England. In its long history, the Bank has laid the foundation for central bank policy everywhere. Particularly has this been true since it assumed its present form under the Peel Act of 1844.

Degree of Government Control

Given its present structure at a period when the *laissez-faire* philosophy was at the height of its influence, the Bank

has been singularly free from government control, except where a national crisis like the World War has made of it a part of the national war machinery. Most other countries, like Germany and France, went to the opposite extreme when they organized their central banks, and placed them under the domination of the state. With the exception of the new Reichsbank, devised by the Dawes commission in 1924, central banks are everywhere bearing the mark of the wartime domination of every phase of business activity. Even the Bank of England is feeling the effect of a war-begotten softening in public antipathy toward government interference. The case of the new Reichsbank is hardly a normal one since its formation and establishment were linked with reparations payments, and a strong feeling of distrust existed toward the German government.

It will be recalled that a bank-dominated Federal Reserve Board was originally planned for the Reserve System of the United States, but, that largely through the influence of Mr. Bryan, the Board was made an instrumentality of the government. There is no valid reason for believing that the former type of body would have been any less solicitous of the public interest than the latter has been. The management of the twelve Reserve Banks has been under the domination of bankers, except for general supervision by the Board, and yet, throughout the twelve districts, has been fully considerate of the public interest. Under our present arrangement, partisan politics and Treasury domination have been able more easily to intrude into the Board's personnel and policies.

In spite of our antipathy toward central banking and the insistence of writers and bank officials that the Reserve System is not a central banking organization, the lines of demarcation between our regional scheme and the central bank of a European country tend to be obliterated. Through the gradual assumption of authority by the Reserve Board, and the development of uniformity of policy by means of Governors'

and Reserve Agents' conferences and the activities of the committee on open market operations, the twelve banks are functioning with a large measure of unity. The location and relatively superior strength of the New York Reserve Bank have automatically thrust upon it many of the obligations of a national central bank, particularly where questions of inter-central bank relations are involved.

A European is amazed at our mass of conflicting bank legislation. The legislatures of forty-eight states as well as the Congress of the United States seldom fail at any session to modify existing laws. Furthermore, we have gone to great length in permitting supervisory authorities to prescribe for the conduct of bankers, whereas in other countries they are left quite largely to run their businesses as they see fit.

In France, aside from the statutes which deal with the Bank of France, the Crédit Foncier (mortgage credit system), and a few other public or quasi-public institutions, there is no special legislation governing either the creation or management of the private and joint stock banks. Some of them voluntarily publish statements of their condition, but since the contents are not uniform, they are not comparable nor is the information detailed enough to shed any real light upon their operations. The banks are the object of constant attacks in the French parliament, but the constant threats of public ownership or national regulation never seem to materialize. The only statutes to which the joint stock banks must conform are the laws of general business incorporation. Consequently French banks can exercise whatever functions they please, aside from issuing notes to circulate as money.

British joint stock banks likewise are subjected to virtually no regulation. The only statutory provisions applying to them are the prohibition against note issue and the requirement made of all joint stock companies that they must submit an annual return to the Registrar of Joint Stock Companies and hold an annual meeting of their stockholders.

In Germany the rather large number of special institutions having to do largely with savings and coöperative credit have been the object of banking legislation, as has also the Reichsbank; but the Grossbanken, or leading joint stock banks, and the other financial establishments, have the same latitude as is accorded similar institutions in France and Great Britain.

In Canada, disastrous failures from time to time have been responsible for the gradual imposition of regulatory measures, although the ten chartered banks still have considerably more freedom than is accorded to our state and national banks. Beginning at an early date with mild restriction upon the privilege of note issue, various minor restraints were imposed at successive decennial revisions of the Bank Act. In the period preceding the revision of 1913, however, the situation was so unsatisfactory that resort was had to a compulsory audit law. Under its provisions a firm of chartered accountants have to be employed by the stockholders from a list approved by the Minister of Finance and the Canadian Bankers' Association—an organization whose nature we shall consider a little later. The results were frankly disappointing, and in 1924 there was added a system of government examination and supervision. The law of 1924 created the office of Inspector-General of Banks and required him to examine carefully into the affairs of every bank, at least once a year. The inspection of branches, however, is left to each bank's own staff of inspectors. The Inspector-General, in the very nature of the case, cannot give his attention to the affairs of some four thousand branches. He relies upon the central reports and records for such information, and devotes his energies to the management policies of the ten head offices. Since with few exceptions failures in Canada have been due to mismanagement by the central officers, the supervisory policy now in force seems to strike at the heart of Canada's banking difficulties. The results thus far have been gratifying to the public.

The monthly reports which the law of 1924 also required of the banks are most exacting with respect to facts which would be likely to reveal mismanagement. Every bank is required to belong to the Canadian Bankers Association, a body which is unique among banking mechanisms. Unlike our American Bankers Association, the Canadian Association has a quasi-public status. It appoints receivers for failed banks. It oversees the issue and retirement of all bank notes. It appoints three of the four trustees who have charge of the central gold and note reserve which backs issues of notes in excess of the limits prescribed by law for uncovered issues. As is natural, the Association has been hostile to the regulatory measures we have just described, but even the great influence which it possesses in Parliament could not stem the tide of public resentment over the Home Bank failure in 1924, and the consequent demand for effective public supervision.

It is scarcely necessary to reexamine the reasons for the large amount of regulation and supervision of banking which characterizes our own state and national systems. Canada's record without supervision and our own with public regulation carried to great length have been equally bad. Few American banks as large as the chartered banks of Canada have ever failed. The mortality with us has been largely among the small banks of the West and South. Obviously some degree of supervision is needed on this side of the border; but clearly supervision can never perform more than a minor part in a program for the elimination of mismanagement and failures. No amount of public oversight can protect the public from the consequences resulting from mismanagement by inefficient, reckless, or dishonest persons.

Policies of Management

With respect to management methods a marked difference exists between the United States and Europe, particularly the

Continent. The senior officers of a French or German bank are not members of the board of directors but are employed at rather small stated salaries to manage the enterprise for the directors. The Board has complete control over their work and therefore should and does keep informed as to their actions. It is customary for the shareholders to provide that all earnings in excess of a stated minimum be shared with the directors and officers. A negligent officer or director, on the other hand, is made to pay to the extent of his personal fortune. This profit-sharing device has stimulated European bank directors to much greater zeal than characterizes the typical American board member.

Banking Concentration

In no phase of financial policy has the general trend been so strongly in the same direction as has been the case with the movement toward the concentration of banking facilities in a few hands. In Europe, the movement is near the limit of profitableness, while with us it still seems to be in what some economists would style the "stage of diminishing costs."

In our discussion of bank mergers in the United States, comparisons were made with the situation in Great Britain and in Canada. The movement in England is almost as old as joint stock banks themselves. Beginning in the 1830's, it had by 1913 resulted in the reduction of the number of banking corporations to 43 and an increase of the number of their branches to almost six thousand. With the outbreak of the World War, there began a fusion of the great banks which has resulted in the reduction of the number of joint stock banks in England and Wales to sixteen, with nearly 11,000 branches. Five of the banks, as we have already observed, through their 7600 branches control more than eighty per cent of the total banking resources. The total assets of the Bank of England, of some 300 millions, are less than those of the smallest of the "Big Five."

In Canada, but ten banks remain (1929) as compared with eighteen in 1919 and thirty in 1909. Three of the ten have about seventy per cent of the commercial banking assets of the Dominion.

The five largest banks of France control somewhat more than a third of the banking offices of the country, but there is still a considerable number of independent concerns. The great credit banks, as they are called, have expanded by the establishment of competing branches rather than by absorbing existing independent units. The war compelled the closing of numerous offices, but, since the armistice, the lost ground has been regained and new branches have been added at home, in Alsace-Lorraine and abroad. While there has been no such spectacular amalgamation movement as in Great Britain and the United States, there is no doubt that the great credit banks of France are becoming entrenched in their already dominant position.

The German movement toward concentration started with the crisis of 1873 and has continued in somewhat uneven fashion until today only four commercial banking corporations of any considerable size (capital of 10 million marks or more) are independent of the seven Grossbanken.

Having about reached the limit of expansion short of consolidation into a single money trust, European banks are now engaged in programs of expansion in other parts of the world. They regard this move not only as an additional source of profit but as a essential service to the national economic welfare, since a close relationship exists between the source from which goods are obtained and that from which the purchase is financed.

Aside from mergers due to failure, which have accounted for some of the American and Canadian consolidations and absorptions, certain causes have been common to the movement in all countries: (1) a desire to lessen competition or to compete more successfully with larger rivals; (2) an ambi-

tion to earn larger profits through the economies alleged to exist in large scale operation, and through the ability to serve one's clientele in a larger way; (3) a rivalry between banking groups for supremacy; and (4) the profit to be derived from the sale of the shares of the new enterprise.

In virtually all countries where consolidation is going on, uneasiness exists for fear the movement may result in an unreasonable restraint of competition. So long as the public is convinced that substantial competition still exists, it will not be appalled by mere size but it will look with extreme disfavor at anything that savors of money monopoly. If concentrations in any country reach that point they will be taken over by the state or compelled to dissolve.

Outside of California, bank amalgamations in the United States are confined to institutions in the same city, but we may expect to see a liberalization of state laws and a relaxation of the provisions of the McFadden Act which prevent banks from opening new branches outside of the cities and villages in which they are now situated.

Departmentalizing Banking Services

The progressive departmentalizing of banking enterprises is likewise a phenomenon common to most countries. In Germany, one can take care of all of his financial needs in one of the Grossbanken. The borrowing of money, the collection of bills, the securing of acceptances, the purchase and sale of foreign exchange, and the opening of deposit accounts mark them as fairly orthodox banking ventures, but this is only one side of the picture. These banks take complete charge of the formation of new businesses, grant them liberal credits, take over issues of stocks and bonds and sell them to the public. Their very smallest branches serve as outlets for issues of stocks and bonds and as means of collecting savings. The Grossbanken own seats on the stock exchanges and execute

orders representing a large part of the total volume of security trading in Germany. Although the regular banks make a strong bid for savings, the credit union and the public savings bank are particularly virile and dominate the small account field. Central state institutions have been set up to invest funds for savings banks and to provide supplementary funds to credit unions. There is but one field with which the Grossbanken have little to do, viz., loans upon land. The life insurance company, the private lender and the savings bank are factors in the field of mortgage loans, but the land banks, both rural and urban, with their long-term amortization feature and their bond issues based upon the aggregations of mortgages, are the major source of supply.

In Canada the chartered banks scrupulously avoid fiduciary operations, loans upon mortgages, or the underwriting of security issues. Fiduciary services are rendered by trust companies which devote themselves to this single type of financial service. Some of them, however, are affiliated with one of the banks. The farm loan business of the Dominion still continues largely in the hands of insurance and mortgage companies, in spite of the fact that virtually all of the provinces have established their own systems of rural credit. Since the banks do not engage in originating or underwriting securities, the Canadian investment banker has the field pretty much to himself. Bonds are sold at the various bank branches, but they are mostly the issues of the Dominion, the national railways, or one of the smaller divisions of government. Canada, it may be noted, is the only country where the incorporated home banks are given a monopoly. In others, the private bank and the branches of foreign and colonial institutions all compete with the joint stock enterprises to a greater or lesser degree.

With respect to savings, the chartered banks have the competition of both the postal savings system and that operated by the Treasury, but the patronage accorded to these public

institutions has experienced a marked decline. Neither have the savings banks established by the larger provinces, largely to secure cheap money for public works, proved to be serious competitors of the regular banks. As is the case in the United States, the Canadian building and loan associations, known there as "Loan Companies," accumulate large amounts of capital in small payments, but, unlike the great majority of our associations, they lend both on urban homes and farm land.

The English joint stock bank, starting in a conservative fashion, has gradually increased the variety of its services and is becoming a full-fledged department store of finance. Until recently, the idea of corporate trusteeship did not meet with favor in England; but since the war, the trust departments established by the banks have made remarkable headway. With the passing of the old accepting firms, this business too is coming into the hands of the joint stock banks. In fact every sort of service relating to foreign trade finance has been highly developed by them.

They do not themselves execute orders for stocks on the floor of the Exchange, but customers can leave orders with them and the broker who does execute them divides his commission with the bank. The origination and flotation of issues of securities is in the hands of merchant bankers, so called, and company promoters. The former confine their operations to the issues of some governmental division or a well-established business. New enterprises have to seek the services of the promoter who reaches the public through advertising and private selling.

Compared with the elaborate rural credit machinery found in the United States and on the Continent, England would seem to have neglected the farmer. The joint stock bank, being a stickler for liquidity in its loans, leaves the farm loan field largely to private and institutional investors. The small farmers rely chiefly upon the storekeeper for their current

needs during the growing season, while the better-to-do obtain loans at the regular banks on none too favorable terms. There is considerable agitation for a rural credit system and no doubt one will soon be forthcoming.

The English joint stock banks have the competition of a postal savings system which is somewhat more liberal than our own. One half per cent more is paid on savings and no limit is placed upon the size of accounts, except that not more than five hundred pounds can be deposited in any year. The so-called Trustee Savings bank which invests its funds in British government bonds, and the "Building Societies" also compete for savings, but the joint stock banks with their increasing array of services are more than holding their own.

In France, notwithstanding the lack of legal restraint, there has not been so extensive a development in the functions of the banks as we found in Germany. In the acceptance field, for example, they have not as yet become formidable competitors of the private banking houses. In the past, they have been heavy investors in foreign government loans; in fact, French industrialists were wont to complain because of the failure of their banks to furnish them with adequate financial backing. In some instances financing of French enterprises has had to be done in a neighboring country. There are, however, a considerable number of investment houses (*banques d'affaires*) which organize and finance business ventures. Moreover, since the war, both the joint stock bank and the investor have lost all their preference for the securities of weak governments and are more kindly disposed toward domestic industrial obligations.

France, like Germany, has a state-owned central bank for savings, into which savings banks are required to place their deposits. The central bank (*caisse des dépôts et consignations*) in its turn invests these funds in government loans and sends its net earnings back to the savings banks for the benefit of the depositors.

The French farmer has been well provided with credit machinery. He obtains his small short term loans from his credit union which is associated with thousands of others in a nation-wide organization known as the Crédit Agricole. The government has subsidized the system with a non-interest-bearing loan. The Crédit Foncier lends on urban or farm property, utilizing the amortized payment plan and mortgage bond issue in much the same way as they are employed by our Federal Farm Loan System.

Services to the State

So far as the services which the banking system performs for the state are concerned,[1] we recall our own unfortunate experience with pet banks and an Independent Treasury, as contrasted with our successful employment of the two United States Banks between 1791 and 1836, and the government's increasing use of the facilities of the Reserve Banks at the present time.

European governments have long employed the facilities of their respective central banks to the fullest extent. In fact, so essential are the services of a state bank to the currency and debt problems of a nation that the establishment of such institutions has constituted one of the important elements in recent programs for the financial rehabilitation of newly formed nations. Canada, in the absence of a central bank, is compelled to rely upon the Dominion Treasury and the ten chartered banks to perform the fiscal services usually entrusted to such an institution.

Note Issue

With respect to note issue, the general tendency is to follow the precedent which Napoleon I established in 1803 when he

[1] The services of a central bank organization to the government were discussed fully in Chapter VII so it is hardly necessary to recount them here.

gave a monopoly of issue to the Bank of France. Note issue is coming to be recognized as something more than mere extension of bank credit. It has become more or less of an official function connected with the administration of public finances and the maintenance of general monetary stability. To place the privilege exclusively in the hands of privately operated central banks avoids the ills of Treasury manipulation of the currency, on one hand, and those of overissue by irresponsible private interests for the sake of earning swollen profits on the other. The former is being recognized as the lesser of the two evils and note issue is being concentrated more and more in the hands of the central bank, regardless of the degree of government domination. The lack of the issue privilege, even in countries like France which have not developed the use of deposit accounts to a high degree, has not hampered the operations of the commercial banks, inasmuch as their eligible paper can be exchanged for notes at the Bank of France at a low discount rate. Our Federal Reserve Board has not seen fit to use its powers of restraint over the issues of the several Reserve Banks, and yet, with the exception of the extraordinary post-war inflation experience of 1919–21, the banks have always maintained a note reserve much in excess of the legal minimum. Such an excess would be a constant temptation to a purely profit-making banking enterprise to expand its issues to the limit, even though the stability of the price level were impaired thereby.

Canada, it is true, entrusts the issue function to her ten privately owned and operated banks, but none of them is permitted to issue an amount in excess of its paid-up capital, except during the crop-moving period, when an additional issue is allowed up to fifteen per cent of capital and surplus. Currency requirements in excess of these amounts must be met (1) by a dollar for dollar deposit of gold or Dominion notes in a central fund, or (2) by obtaining a supply of Dominion notes from the Minister of Finance upon a pledge

of eligible securities, and the payment of an interest charge to the Treasury. The fact that the Canadian bank note is sent home daily through the various clearing and redemption centers also tends to keep the total outstanding issue within the amount needed by trade.

As a concession to the Bank of England, only banks more than sixty-five miles from London have been allowed to issue notes. Now that the last of these provincial institutions has surrendered the privilege or been absorbed by a bank in the forbidden area, the Bank of England has a complete monopoly of issue in England and Wales.

When the original German Reichsbank was established in 1875, the thirty-three existing banks of issue were allowed to continue the exercise of that privilege, but the law imposed narrow limitations upon all of them but the Reichsbank. Gradually all but four—the state banks of the four South German states—surrendered the right to the Reichsbank. When it was proposed in the Dawes Committee in 1924 that the new Reichsbank be given a monopoly of issue, the German representatives demurred, stating that while they acquiesced in the principle of the centralized note issue, it was not politically feasible to force such a measure upon the non-Prussian states.

We observed in our discussion of the national bank note how the authors of the Federal Reserve Act had in mind the centralization of note issue power in the hands of the twelve Reserve Banks, and how the start made in that direction was ended by the entry of this country into the war. It is not likely that we shall soon join the ranks of nations which have placed the function of note issue exclusively in the hands of the central banking organization. Most thoughtful people would subscribe to the theoretical desirability of such a step, but, as we observed, it is not a practicable step to take at this time. Our national bank note is such in little more than name, since it is so bound by restrictions and limitations. It

serves as a harmless and convenient form of pocket money, but it cannot perform the functions of a genuine bank note. Its continuance therefore will not be a hindrance to the Federal Reserve authorities in their efforts to maintain stability of money and credit.

When a nation has passed through a disastrous financial experience it is always disposed to lean over backward in guarding against a repetition of its misfortunes. Such was the case with both our own national bank currency restrictions and those of the Bank of England. The latter's reconstitution in 1844 came on the heels of a disastrous financial situation precipitated by the crisis of 1837, and reflected also English distaste for the long period of currency instability which marked the Napoleonic epoch. Consequently it was stipulated in the Peel Act that all of the note issues of the Bank of England with the exception of a minor portion covered by English government securities should be backed pound for pound with gold, thus eliminating the elastic element completely.

As was the case with the United States in pre-Federal Reserve days, this defect was counteracted in normal periods by the fact that a major part of the transactions of British business are paid for out of checking accounts, which constitute a highly elastic form of currency. In times of crisis, the Bank of England authorities with the approval of the Cabinet have occasionally had to violate the Bank Act and issue emergency notes without a gold cover of one hundred per cent. Parliament never failed to give its official sanction when called upon later to absolve the Bank from any taint of law-breaking.

In 1928, the one pound and ten shilling notes issued by the English treasury during the war were taken over by the Bank of England and will be retired by it and replaced with small denomination notes of its own. Under this arrangement, the amount of the Bank's circulation backed by securities has had

to be greatly increased. The old policy of inelasticity has been continued, but with a little less rigidity. A maximum of £260,000,000 has been prescribed for the portion of the note issue not covered pound for pound with gold. It is provided, however, that the cabinet may grant the Bank leave to exceed this maximum for a period of six months, the grant being renewable up to two years. If, in the meantime, Parliament is persuaded that the additional amounts asked for are needed permanently, it can increase the legal maximum. In any case it reserves the right to disapprove of the action of the ministry in extending the limit beyond six months.

The authors of the law creating the old Reichsbank used the Bank of England as a model, but when it came to provisions governing note issue they substituted a modern scientifically devised system for the rigid Bank of England currency. Subject to the maintenance of adequate gold reserves and the payment of a five per cent tax for issues in excess of a specified "contingent," the volume of notes was left to be regulated automatically by the requirements of business. When the new Reichsbank was created in 1924, our Federal Reserve percentage—forty—was selected as the legal minimum ratio of gold to notes, although the Bank is permitted to count prime foreign bills as gold, up to a fourth of the total reserve. The rest of the cover for the Reichsbank currency is, as with us, commercial paper.

As we have noted in another place, the Canadian banks also adopted an elastic system of note issue by basing it upon the general assets of the chartered banks, which are composed of a liquid form of loan and investment. Subject to the restraints already described in this chapter, the banks are free to vary the volume outstanding in accordance with changes in the currency requirements of their constituency.

Until a thirty-five per cent reserve was prescribed by the monetary reconstruction legislation of 1928, France had granted the Bank of France a free hand with respect both

to reserves and other cover for notes. Parliament fixed the maximum limit which could be outstanding, but was very ready to increase it. Beginning with an original upper limit of but 30,000,000 francs in 1803, the legal maximum was increased from time to time until at the outbreak of the World War it stood at sixty-eight hundred millions. From that time until the recent stabilization of the franc it mounted to almost astronomical figures. In 1928, it was abandoned entirely. In anticipation of its return to stable financial conditions, the Bank of France built its reserves up to something like the old pre-war basis of from two-thirds to three-fourths of its note issue, whereas during the troubled financial period following the war it had shrunk to less than five per cent. Under the law of 1928 it can refuse to redeem its notes, for the time being, except in gold bars, for use in exporting and in the arts.

With respect to note issue in general it may be said that it has ceased to be an important medium for use by ordinary banks in the extension of credit to their customers and has taken on a semi-official aspect. France and Germany are encouraging the use of checks in the place of currency for the ordinary consumer transactions, but progress will necessarily be slow in changing a deep-rooted custom. Moreover, the standard of living of the masses is much lower than with us and the field of the bank account and the check is accordingly very much more limited.

Bank Portfolios

In Great Britain, the Bank of England continues to maintain its portfolio in a liquid position by confining its lending and discounting operations to short-term advances to the government, by the discount of commercial bills for and making of collateral loans to regular customers, and, when the joint stock banks have called the loans of their bill broker and dis-

count house customers, by providing them also with the credit they require.

The statements of the joint stock banks are so cryptic and their policies so carefully concealed that it is difficult to ascertain what the contents of their portfolios really are. Investments in government bills and in the short-term paper of private businesses are lumped together in the banks' balance sheets under the heading "bills discounted." In like manner, the long-term securities of the government and those of private concerns are listed as "investments." It is known to be the policy of the joint stock banks, however, not to keep any considerable amount of their funds tied up in the bonds and shares of business corporations. Under "advances" are placed all extensions of credit not based upon the purchase of a bill of exchange from the borrower. These must as a rule be secured by a deposit of collateral in the form of stock exchange securities, shipping documents, warehouse receipts, mortgages and other claims or liens against property. The single name promissory note, unsecured, and used in financing the distribution of merchandise, has little vogue in Europe, just as their method of drawing bills upon the purchasers of goods has made only limited progress with us. The Canadians are still much more extensive users of the trade bill than we are, but our methods are making steady headway in Canada, and the British practice of lending by means of extending the right to overdraw is declining. The laws of Canada grant bankers more freedom with respect to the lending operation than is the case in the United States, the principal prohibition being directed against loans upon land, buildings, ships, or bank stock.

The Bank of France is strictly limited in respect to the content of its porfolio. No bill of more than three months' maturity is eligible for discount. It must contain three high-grade names or two such names and a deposit of government collateral or Bank of France stock. Direct loans must

have government securities as collateral. The commercial banks rediscount freely at the Bank of France in order to secure its notes for use in their own operations. Because of the strictness of the central bank's requirements, business men for the most part obtain their accommodations from a joint stock or private bank, thus making the Bank of France chiefly a bankers' and government institution.

In the French commercial banks, discounts of trade bills and loans on collateral predominate. As we have seen, they have not had the close affiliation with businesses which characterizes the German situation and have, in the past, underwritten and distributed issues of Russia, the Balkan and Near East states, and South America more freely than they have those of French industries.

The German Reichsbank, like the Bank of France, requires that paper offered bear three names and a maturity date not more than three months distant. As in France, suitable collateral may be substituted for the third name. Under the new régime, advances to the state are strictly limited, so that the deplorable condition common to the old Bank and other quasi-public banks during and after the war may be avoided. Lombards, or loans on collateral, are permitted, provided suitable cover in the form of government securities, commercial bills, or warehouse receipts is provided.

Since the German farmer has long been provided with excellent credit facilities of his own, the commercial banks have turned to industrial and commercial financing. Whereas in England the development of modern industry was a slow process and financed little by little by the public, the industrialization of Germany occurred in a very short space of time and required the active leadership and participation of the financial interests. The individual investor in Germany has always had a preference for mortgage bonds, so that the banks have had to carry a relatively heavier load of industrial debt. As is the case in France and England, the bill and the col-

lateral note predominate in the commercial bank portfolios of Germany, as opposed to our single name business paper.

In surveying the portfolios of the leading countries, taken as a whole, one notes a pronounced shift toward the non-self-liquidating type of earning assets. Government obligations held by banks, although reduced from the huge proportions of the war period, are still very much in excess of pre-war days. The stronger corporations are resorting more to security issues and less to bank loans in supplying their current capital needs. The banks of all countries have had to carry a heavy load of frozen paper for firms which were badly injured by the world-wide post-war crisis. The time bill or trade acceptance, as it is called with us, has therefore lost some of the high average standing it possessed before the war. A deposit of collateral or the addition of the name of an accepting bank is exacted in connection with trade bills, to an extent unknown in pre-war days.

Another common characteristic of post-war credit extension has been the special consideration given to the financing of foreign trade. Firms engaged in the export business have been given more than usual attention and in some cases special forms of aid have been devised for financing foreign trade. The objectives appear to be the restoration of markets lost during the war and accumulation of credits with which to meet huge obligations owed in the United States and other countries, as a result of loans contracted during and since the war.

Clearing and Collection Systems

With respect to the settlement of out-of-town obligations and in fact the whole problem of clearing and collecting checks and that of interbank relationships, the United States is a law unto itself. In no other country do we find such an enormous volume of personal checks in transit through the

mails nor so many and so widely separated drawee banks. In France the tardy growth of payment by check has resulted in the development of a separate transfer system operated through the Bank of France and its approximately seven hundred branches and agencies. Not only private parties, but the other banks as well, maintain "transfer" accounts with a branch or agency of the Bank of France, for the purpose of transferring funds to out-of-town payees, including even a bank's own branches. One merely presents or sends in his slip containing the name and address of the payee, and the transfer department of the Bank of France instructs the branch in the payee's town to credit him with the amount specified.

The local clearing houses in French cities have naturally never achieved the volume of transactions despatched in an American city of similar size, nor have they undertaken any of the regulatory or service functions which we discussed in our examination of the American clearing house association.

In Germany small remittances are made through the transfer or "Giro" department of the post-office. With the equivalent of an American dollar, a German can open a transfer account at any post-office. This enables him to settle a debt with any other person merely by dropping an instruction card in the nearest mail box. The post-office notifies the payee, crediting his Giro account if he has one, or, if he has not, delivering the money to him. A merchant maintains an account at his local post-office and obtains payment from a charge customer through the latter's depositing or transferring the amount of his bill to the merchant's account at the post-office. Remittance of larger sums is effected in the same manner through the transfer system of the Reichsbank. Firms and banks maintain special transfer accounts with some branch of the Reichsbank for the purpose of having facilities for making remittances. Just as in France, the local clearing house in a German city does not have as large an amount of business

or wield as great influence over local banking conduct as is the case in the United States.

In Great Britain, because of the wide use of checks, the clearing house has a more important work to do than on the Continent. Associations exist in all prominent towns but the clearings in London between the large branch banks are incomparably greater. The London clearing house is operated in three divisions. In the first, items on the down-town banking offices are handled; a second takes care of the outlying offices embraced in the "Metropolitan District," and the third performs much the same function as the clearing and collection departments of the Federal Reserve Banks, inasmuch as it clears all of the out-of-town items. The accounts carried by the several commercial banks with the Bank of England serve like our gold settlement fund as a medium through which banks with unfavorable balances in the clearings settle with those whose balances are favorable.

In Canada branches of the several banks located in the same city exchange checks through local clearing houses. Checks on out-of-town branches are cleared as far as possible at regional centers. A unique feature of Canadian banking is that another bank's notes are treated the same as its own checks, being sent home daily through the clearing system.

Responsibility for the Specie Reserve

In order that a central banking organization may exercise an effective influence in behalf of general credit stability, it is desirable that, in addition to control of the note issue function, it should have centered in its hands the specie reserve of the nation and that the market for credit should be sufficiently dependent upon the central bank to enable it to exercise a restraining or stimulating influence upon the credit situation whenever such action seems desirable. With the exception of Canada, all of the countries we have included in

this brief comparative banking study have mobilized the banking reserve in central banks. In the United States, in order to establish so revolutionary a departure from customary practice, the maintenance by member banks of deposits with the Reserve Banks was made compulsory. In the other countries, the commercial banks voluntarily carry reserve deposits with the central bank, even without the inducement of an interest payment on their balances. They find the account at the central bank useful in settling interbank balances and value the rediscount privilege sufficiently to prompt the maintenance of this complete relationship of a regular customer with his banker. It is doubtful if the joint stock banks of Europe undergo any sacrifice of earnings by maintaining part of their cash reserves at the central bank, for if no such auxiliary reserve were at hand, the vault cash would have to be increased correspondingly.

Canadian banks are closely allied with the American money market and carry balances with New York banks. The amounts "due to banks" and "due from banks" in a Canadian bank's balance sheet are relatively small, however, so far as domestic banks are concerned, for with their extensive competitive branch systems none of the banks would have much object in carrying balances with another. What cash concentration there is will be found in the branches at the head office city, the head office itself being merely an administrative headquarters and not a bank. The Canadian parliament has never prescribed a legal minimum reserve ratio, but merely provides that whatever reserve is carried must contain Dominion notes to the extent of forty per cent.

The incorporation of a specific reserve percentage in the law establishing the new Reichsbank, and in the recent amendment made to the charter of the Bank of France, indicates a definite trend in the direction of increased public control. It will not be surprising if Canada adds a specific reserve requirement to her other regulatory measures. As

was pointed out early in this whole discussion of monetary and banking policy, public regulation does not come out of a clear sky but is the result of a demand for the correction of existing abuses. The imposition of a reserve requirement upon the Bank of France is no exception to the rule. It was the outgrowth of the orgy of inflation following the war.

In pre-war days, all of the leading countries maintained a gold standard in the fullest sense of the term, save that France reserved for her central bank the right to redeem its obligations in silver in case the gold reserve was reduced unduly. The pre-war understanding of a gold standard country was one which permitted the export of gold without restraint, stood ready to redeem all of the other forms of money in gold, and permitted gold to circulate within the country to the extent that the public cared to use it.

Nominally all of the leading nations have now returned to the gold standard, after the lapse caused by the war. The fact is that none of them except the United States is maintaining a gold standard in the pre-war sense. They have taken gold out of pocket circulation, they do not redeem other forms of money in gold, nor do they allow it to move in and out of the country unrestrained. The only sense in which they have restored the gold standard is that they are using their gold reserve and supplies of bills on gold centers to maintain their local monetary unit at a parity with the United States dollar.

When we consider the problem of inter-central bank cooperation a little later, we shall see that the conservation of the world's gold stock is one of the important objects to be attained.

2. Comparative Monetary Policy

In the main, monetary evolution in Europe and America followed substantially the same pattern, during the period of more than a century preceding the World War. One by

one, the nations have come to adopt substantially similar measures of monetary reconstruction since the Armistice.

The beginning of the nineteenth century found the United States and all of the leading European countries legally committed to maintain bimetallic systems. Unsatisfactory as it proved to be, bimetallism had marked a distinct step in advance over the practice of preceding generations which centered largely about the tamperings of monarchs with the content of the coins of the realm. Therefore, with the practice of permitting anyone to bring any quantity of gold or silver to the mint and have it converted into coins of clearly defined weight and fineness, great progress had been made.

Experience with a bimetallic standard, however, soon demonstrated that this system also contained, to a smaller degree, the same weakness as its predecessor, for it undertook to establish between silver and gold an artificial man-made relationship as a substitute for that established by the natural working of supply and demand.

The frequent changes in the natural or market ratio between silver and gold caused it to be continually out of line with the ratios at which the mints of the several countries offered to buy the two metals for coinage. As a result the metal that was overvalued by the mint was marketed there, but the other (or undervalued) metal not only was not offered at the mint but the coins of that metal already in circulation tended to be melted or exported to some place where their real worth could be realized. This tendency of the two metals to play "hide and seek" when linked together in a bimetallic system, caused Great Britain to close her mint to the free coinage of silver and to place silver coins in a subsidiary relationship to gold. Legislation in 1774 had virtually put an end to bimetallism in England, but it was not formally displaced until 1816.

Meanwhile the governments of France, and other countries which persisted in their adherence to the double stand-

ard, realized fully the futility of expecting the market ratio to conform without deviation to the one fixed by the state, but they believed that the price level could be kept more nearly stable if both metals had access to the mint. Minor disparities between mint and market prices would tend to correct themselves, while more serious differences could be eradicated by legislative action, bringing the legal ratio into conformity with the market situation. Until 1873, fluctuations in the values of the two metals while continual were not marked, seeming to depend less upon variations in their production than upon the relative amounts of each required for making settlements between countries. Payments to the Orient, for example, required silver, shipments to Great Britain were made in gold, while the bimetallic nations, with their equal recognition of both metals, afforded facilities for converting one metal into the other. Marked changes in supply, such as characterized the period of gold discoveries beginning in 1848, naturally had an influence upon the market ratio, but they manifested themselves through the machinery for settling international balances. During the whole period ending in 1873 France made no modifications whatever in her mint ratio of 15½ to 1, while, as we have seen, but one change was made by the United States, viz., from 15 to 1 to the 16 to 1 ratio prescribed by the Gold Bill of 1834, and modified very slightly in 1837.

In spite of the fact that the bimetallic countries were upon what was really an alternating standard rather than a double one, the fluctuations were so slight that outside of the dealers in precious metals no one was particularly concerned. Beginning with the California discoveries, however, a marked increase in world gold production occurred, and the United States virtually abandoned the double standard by enacting the subsidiary coinage legislation of 1853.

The successful use of the single gold standard by Great Britain and the natural universal preference for gold, coupled

with a marked increase in the production of silver in tho early 'seventies, caused one after another of the other nations to suspend the free coinage of silver. Germany, in establishing a monetary system for the newly formed empire in 1871, adopted the single gold standard. The United States dropped the silver dollar from the coinage list in 1873. The samo year, France and Belgium, and, a year later, the other countries of the Latin Union placed a limit upon the coinage of full legal tender silver pieces.

As we have already observed, the resulting decline in in the price of raw silver stirred the producers of tho United States to action and led to an alliance with the farmers and the enactment of two silver purchase measures as concessions from the conservative adherents of the gold standard. So serious were the effects of falling prices, following the general demonetization of silver, that had it not been for England's strong opposition, international bimetallism might have been introduced as a remedy. Agitation for such a step was at its height simultaneously in the United States and Germany. The pledge of the Republican party in America in 1896 to do all in its power to bring about bimetallism by international agreement was a considerable factor in the defeat of Mr. Bryan and his national bimetallism program.

The period from 1893 to 1914 was characterized in all parts of the globe by a stabilization movement which expressed itself in the more affluent nations by the building up of a strong gold monometallic system fortified by ample specie reserves, and, in certain others, by a gold exchange standard in which silver and paper were kept at par with the gold monetary unit of some other country through foreign exchange operations.

The three European countries we have been comparing throughout this discussion built up circulating money of gold, silver and bank notes, reserving the latter for fairly large denominations, although the tendency was manifesting itself

in France and Germany to utilize bank notes of smaller size in place of specie. France, like the United States, had a great quantity of large irredeemable silver pieces which were a relic of the old bimetallic days. All three nations employed gold quite freely as pocket money, a practice which had very largely gone out of use in America.

The war brought about the immediate suspension of specie payments and the mobilization of gold. Later, subsidiary silver went into hiding along with such gold as had escaped the efforts of the authorities to garner it into the central bank. England kept the expansion of her depreciated currency within moderate bounds, but the French franc eventually shrank almost to a tenth of its former value in terms of the American dollar, while the currencies of the central powers and Russia became utterly worthless.

One by one, they have all succeeded in stabilizing their currencies at some fixed relationship to the dollar, have stopped borrowing bank notes for the purpose of balancing their budgets, and have accumulated large supplies of gold and foreign bills of exchange with which to correct any tendency of the monetary unit to shrink in value below the established relationship with the dollar. Paper has displaced gold in pocket circulation, but subsidiary silver pieces are again in use.

France in 1928 formally adopted a new gold unit valued at close to 3.92 cents per franc, as opposed to the pre-war franc worth 19.3 cents in our money. The old limping standard with its irredeemable five franc silver pieces has not been resumed. The new franc is exclusively a gold unit, although other forms of money will not be redeemed in gold for the present, except as one may obtain ingots for export or metallurgical uses. The selection of the existing value of the old paper franc as the basis for the value of the new currency was a wise step, inasmuch as no disturbance of the existing level of prices could result from the change. Any attempt to

restore the franc to its old purchasing power would have caused a disastrous fall in prices and inflicted an intolerable burden in the form of taxation for meeting public debts contracted on a depreciated paper basis.

The German paper mark had fallen to a point of utter worthlessness, so that no harm was done by a return to the pre-war value of 23.8 cents per mark. The old pre-war pocket circulation currency with the exception of gold coins is being restored. The notes of the Reichsbank can be redeemed by it in gold coin, gold ingots, or foreign bills of exchange. For the present it proposes to be sparing of its gold coin.

In England, also, the people have become habituated to the use of the one pound and ten shilling paper currency, whereas before the World War the five pound note was the smallest denomination in which paper money was issued. The Bank of England at present is paying out gold in bar form only.

The war has not been an unmixed evil so far as currency experience is concerned. Countries have learned to keep their money at par without actually redeeming it in gold coin. The old mistrust and prejudice against smaller denominations of paper money have disappeared—in fact it has become quite obvious that bills of small denomination, because of the large and steady demand for them, are in reality less difficult to manage than are the larger denominations. The recovery of gold from pocket circulation, when the necessity arises for its mobilization in the central banking reserve, is an exceedingly difficult task. It is much better to keep it under central bank control and to substitute the bank's notes for it in circulation. Lastly, the war and the reconstruction of currencies which followed several years later have brought about a commendable simplification and other similar evidences of progress in monetary science. Superfluous coins have been dropped and provisions interfering with the elasticity of the currency have been liberalized.

3. The Subordination of National to International Considerations in Monetary and Banking Policy

Even from the hasty survey we made of recent financial developments in the Western World, it is evident that, the world over, the formulation of monetary and banking policy is coming to be governed more by the social as opposed to the selfishly commercial point of view.

The recent trend toward international coöperation, to which passing references have been made, is entirely in keeping with this changing attitude. It does not overlook the advantages accruing to business from a state of international stability, but it stresses the importance of coöperation because economic isolation is a serious impediment to world progress.

Developments in the field of international financial coöperation have had objectives which varied somewhat with the situation existing at the particular time. The first instance of formal coöperation by central banks occurred when our Federal Reserve Banks, under the powers granted them to establish foreign agencies, arranged with the Bank of England to act as their correspondent. The objective in this case was to facilitate financial operations growing out of the heavy war-time movement of supplies and munitions from the United States to Europe.

Later, the Reserve Banks, especially the New York Bank, became the American correspondents of several of the central banks of Europe, acting as their depositaries and buying and selling acceptances and other commercial bills for them as they directed.

More recently, the Federal Reserve Bank of New York has participated in the restoration of European currency systems by placing substantial credits at the disposal of their respective central banks, for use in case their supply of gold and foreign bills should prove inadequate to check an unfavorable turn in the exchanges.

Most of the countries in question were unable to afford an outright gold standard and adopted a gold exchange standard instead. In such a case, the reserve consists of gold and bills of exchange of short maturity, payable in New York or London or other large money center. The substitution of earning assets for gold in its reserve enables the bank to obtain the latter easily and still does not deprive it of the income earned from the bills. The whole arrangement, however, places a heavy burden of responsibility upon the money centers and calls for friendly coöperation between the respective central banks in order to avoid serious disturbances in the money markets because of sudden demands for settlement.

The latest measure of coöperation has been the central bank governors' secret conferences. It began with a parley between the Bank of England and the Federal Reserve authorities, the outcome of which was that the latter agreed to have due regard for the position of the English bank rate whenever they contemplated changes in rediscount rates. Later, the heads of the Reichsbank and Bank of France were included in these unofficial meetings.

All three of these countries, as well as the other nations which had recently stabilized their currencies with reference to our dollar, were apprehensive of the consequences of independent action on the part of the United States with respect to discount rates, open market operations and other matters likely to disturb the newly gained monetary stability of Europe.

The idea of coöperation among central banks has by no means met with universal approval. Some of the large joint stock banks of European capitals are of the opinion that their respective central banks have been guilty of arrogation in assuming the function of regulators of the national credit structure. The defense offered by the central banks is that the responsibility for national leadership in financial affairs has been forced upon them by the problem of post-war debt

settlements and the sudden rise of the United States to a commanding position in international finance.

In this country, in addition to the element which always decries any kind of cooperative action with foreign countries, there are some really thoughtful persons who doubt the wisdom of our having modified our discount policy in the interest of stabilization in Europe. They feel that the stock market inflation was greatly stimulated by the course we followed. It is doubtful, however, if such a stiffening of rates as the Reserve System might have seen fit to impose would have acted as a serious deterrent to the development of the great bull market which began in 1927. The phenomenal record of earnings shown by American corporations the last four years would have proved to be an irresistible force in driving stock prices upward. On the whole, the country has suffered less from the ills of speculation than it would have done from the wrecking of the newly reconstituted European credit and currency structures.

The problem of gold conservation alone would justify the creation of some sort of international financial mechanism. There has been a growing realization that additions to the world's gold supply were decreasing in amount. Meanwhile old and new countries alike have been flocking to the gold standard and together have erected a great credit structure upon it. In the United States alone, our boasted gold reserve of some seventy per cent of the notes and deposits of the Reserve Banks shrinks to less than seven per cent when the liabilities of the whole banking structure are added. The situation abroad is even less favorable. As we noted in our discussion of the gold standard, the outlook for even the continuation of the present rate of gold production is not hopeful. The general substitution of paper for gold in pocket circulation has been an important measure of conservation, but will have to be supplemented by other measures of economy as the growth of business places an additional burden upon existing reserves.

Our experience following the gold discoveries of the middle of the nineteenth century, and again in the late 'nineties, shows, of course, that it is hazardous to predict anything regarding gold production, for in both of those periods remarkable new deposits were found and new processes were introduced when the future of the world's gold supply was very dark. So far as the present situation is concerned, there seems to be little ground for expecting that rich new fields are about to be brought into production, that revolutionizing of processes is about to occur, or that wholesale transmutation of baser metals into gold will soon be realized.

All countries, since the post-war collapse of prices, have been confronted with a downward secular price trend. If any one nation undertakes to offset the ills of falling prices by independent action, it runs the risk of injuring its export trade and losing much of its gold. In fact, international coöperation is essential to dealing satisfactorily with the whole question of stabilization.

The establishment of an international gold clearance fund, similar in principle to our own gold settlement fund, has long been recognized as a highly desirable step, but because there seems to be no way of absolutely assuring the inviolability of such a system's stock of gold in case of war, no such plan has ever been brought to fulfillment so far as the United States and the nations of Europe are concerned, although a similar method of settling balances between the United States and certain Latin-American countries was employed successfully during the World War and the period immediately thereafter.

The United States and the Allies made an attempt to create such a device in 1916, when the shipment of gold became so hazardous, but the practical difficulties could not be surmounted. Later, at the peace conference at Versailles, a similar plan was agreed upon but never came to fruition.

When one studies a year's record of gold shipments, he is

impressed with the wastefulness of the whole process. The record for 1927, for example, as compiled by the Reserve Board, showed that the United States imported 207 millions in gold from twenty countries and shipped 201 millions to nineteen countries. A gold settlement fund would have obviated all but a fraction of this criss-crossing of shipments.

The Federal Reserve Board at one time invited the other countries to locate such a fund in Washington in proximity to our own clearance system. Because of our remoteness from the quarrels of Europe, it was contended that the United States would be an ideal headquarters for the plan, but the other nations would not agree to its location on this side of the Atlantic.

The nearest approach to gold clearance we have is the practice followed by the New York Reserve Bank of earmarking gold in its vaults on behalf of central banks. It then becomes the property of the central bank in question and no longer counts as part of the Reserve Bank's reserve. One central bank can make a settlement with another by a mere book transfer at the New York Reserve Bank.

The Genoa Conference in 1922 urged upon central banks the necessity of a permanent coöperative program in order (1) to eliminate scrambles for gold, (2) to effect transfers of funds with a minimum of disturbance to the credit structure, (3) to distribute large loans equitably among the various money markets, and (4) to avoid all the avoidable disturbance possible by coöperating with reference to changes in the discount rate. Remarkable teamwork has developed considering how recently all Europe was at war. In 1927, for instance, fourteen central banks joined in assisting Poland in the stabilization of her currency.

In November, 1929, a group of financial experts, including two American bankers, completed a plan for the creation of a bank for international settlements. If the several nations concerned ratify the proposals to which these repre-

sentatives have agreed, and the bank is established, it will not only be an effective means of handling reparations payments but could be employed as a device for settling all international balances, and incidentally could prove to be an important stabilizing mechanism. It is greatly to be regretted that in view of existing legal obstacles and the persistence of a strong isolationist sentiment in the United States, the Federal Reserve Banks, for the present at least, will not participate in the ownership and settlement operations of the new bank.

BIBLIOGRAPHICAL NOTE

The two outstanding collections of material on foreign banking systems are a very recent one, H. P. Willis and B. H. Beckhart, *Foreign Banking Systems* (New York, 1929), and the older series of studies made by various experts for the National Monetary Commission and published in 1910 and 1911.

The former collection is the work of eighteen authors, one representing each of the countries covered, with an introduction by Dr. Willis. The latter series consists of volumes by individual writers and verbatim reports of interviews obtained by the Monetary Commission from banking authorities in a number of foreign countries. In spite of the marked changes in the banking systems of the countries studied, in the twenty years which have elapsed, the various volumes which comprise the Commission's study of foreign banking are very much worth one's perusal.

C. H. Kish and W. A. Elkin, *Central Banks* (London, 1928), present a comparative "study of the constitutions of banks of issue, with an analysis of representative charters."

Ivan Wright in his *Readings in Money, Credit and Banking Principles* (New York, 1926), has brought together much useful material with respect to foreign banking and monetary systems.

Attention is called here again to the work of Nogaro, *Modern Monetary Systems,* and to the *Report on European Currency and Finance,* compiled by Dr. J. Parke Young.

F. Mlynarski, whose work on *Gold and Central Banks* has been cited previously, deals in that volume also with the scramble for gold and the necessity for inter-central bank coöperation.

Willis and Beckhart give a complete bibliography for each of the eighteen monetary and banking studies included in the volume which bears their names.

INDEX

Acceptances, bankers', 193; trade, 81, 198
Advisory Council, Federal, 156
Agricultural credit, types of need for, 320; prior to 1914, 316; present situation, 348; in Canada, 370; in Europe, 371
Agricultural credit corporations, 345
Agriculture, in crisis of 1920, 274; Federal Farm Loan System and, 324; Federal Reserve System and, 337; Federal Intermediate Credit System and, 341

Banking structure, composite character, 14
Big business, effect on loans, 91
Bimetallism, abandonment due to proximity, 6; attempt to restore, 317; experience of leading nations, 385
Bland-Allison Act, 297
Branch banking, basis of opposition historical, 5; early development, 27; action of Harding officials, 28; recent growth, 29; McFadden-Pepper Act, and, 32; California experience, 30, 33; appraisal of, 34, 75; future of, 39; loan policy in, 77; contribution to safety, 120
Brokers' loans, 83; proportion of time and demand, 83; attractiveness as bank assets, 84; percentage of volume to total loans, 86; sources, 86; improvements needed, 87; Federal Reserve System, and, 190, 282
Bryan, W. J., 152, 319, 363
Building and loan associations, 357

California, branch banking in, 30
Canadian banking, amalgamations and mergers, 19, 368; public supervision, 122, 365; note issue, 170, 374; lack of credit control, 255; departmentalization, 370; services to state, 373; clearing and collection, 383; responsibility for specie reserve, 383
Capital stock, 54, 55, 107
Central banking, nature of, 134; background in U. S., 136; ills resulting from lack of, 138; Federal Reserve, American conception of, 142; strength and weakness of regional, 144; services to state, 204; clearing and transfer functions, 204; cooperation between countries, 391, 392
Centralizing mechanism of Federal Reserve, 151
Chain or group banking, 41
Charters, power to grant, 108
Circulation money, haphazard character, 285; history of, U. S., 286; present, U. S., 288; gold as, 290
Class legislation, 7
Clearing and collection, Euro-

pean, 204, 381–383; difficulty in U. S., 205; suitability of Reserve System for, 206; situation in U. S. before 1915, 206; Federal Reserve clearing system, 210; comparison with leading foreign systems, 381
Clearing house associations, 68
Commissions, advantage of study by, 11
Compensated dollar plan, 248
Comptroller of the Currency, powers, 113; chosen from Middle West, 115; abolition of position proposed, 116
Consolidations and mergers, 19; Canada, 19, 368; England, 20, 367; United States, 21; France, 368; Germany, 368
Consumptive loans, 350
Correspondent relationship, 65
Country banks, characteristics of loans, 73
Country Life Commission, 323
Credit, rationing, 269; unions, 355
Crisis of 1920, 274, 337

Decentralization, financial, 67
Degree of public control in banking, United States, 362; France, 364; Great Britain, 364; Germany, 365; Canada, 365
Department store banking, United States, 24; Canada, 370; Europe, 369, 371
Deposits, demand, use in U. S., 55; expense attached to, 56; interest on, 56; balance required of borrower, 60; shift to time, 76
Deposits, guaranty of, 124
Deposits, time, relative increase, 57, 59, 76; interest on, 58
Deposits, government, 59
Directors, bank, 50
Discount policy, objectives, 257; guides to determination of, 259; relation of bank and market, 262; devices for making effective, 268; of Federal Reserve, 258, 270
Districts, Federal Reserve, 148
Domestic Exchange, in U. S., before 1915, 206; under Federal Reserve, 216
Double liability of stockholders, 52, 55

Economic background of financial policy, 3
Edge Act, 46
Eligibility of paper, determined by Federal Reserve Board, 186
England, Bank of, note issue, 178, 375; emergency currency, 183; relation to state, 228; discount policy, 263
English banking system, consolidations and mergers, 20; degree of public control, 364; departmentalization, 371; note issue, 375; portfolios, 378; clearing and collection system, 383
European banking, predominance of trade drafts, 81; absence of regulation, 107, 364; contrast, of central banks with Federal Reserve, 142; clearing and transfer systems, 204; fiscal functions in, 204, 373; policies of management, 366; banking concentration, 367
Examination of banks, state, 104; national, 116; clearing house, 118; Federal Reserve, 119

Failures, bank, 127
Farmers' Alliance, 318
Federal Advisory Council, 156
Federal Farm Loan System, 324; need for, 324; beginnings of, 327; growth, 329, 330; principal features, 329; results, 334; difficulties, 335; appraisal of, 335
Federal Intermediate Credit System, 341

Federal Land Banks, 328, 329, 330
Federal Reserve bank notes, 180–183
Federal Reserve Banks, place in system, 157; and supply of money, 168; reserves, 179; and supply of deposit credit, 183; rediscounts, 184; direct loans to members, 188; open market purchases, 193; and bankers' acceptances, 193; and trade acceptances, 198; results to credit system, of operations, 201
Federal Reserve Board, composition of, 152, 338; duties, 154; weaknesses of such a body, 155; appraisal of experience of, 155; determines eligibility of paper, 186
Federal Reserve Notes, elastic element in currency, 168, 180; process of issue, 170; reserve back of, 177
Federal Reserve System, branch banking and, 40; and foreign banking development, 46; correspondent relationships under, 66; financial decentralization under, 67; changed attitude toward rediscounting under, 76; contribution to banking methods, 78, 187; and banking safety, 119; background of, 141; contrasted with European central banks, 142; position of Reserve Banks in, 157; membership, 159; loans to speculators and, 190, 282; contribution to overexpansion, 191; open market operations, 193; and bankers' acceptances, 193; and trade acceptances, 198; effect on credit system, 201; clearing and collection system, 206; services to the government, 217; discount policy, 258, 270; and agriculture, 337
First Bank of U. S., 136, 217
Fiscal functions of central banks, 204, 373; under Federal Reserve, 217
Fisher, Irving, compensated dollar plan, 248
Foreign commerce, influence upon financial structure, 4
Foreign loans, 48
France, banking in, degree of public control, 364; policies of management, 367; banking concentration, 368; departmentalization, 372; note issue, 373; loan portfolios, 379; clearing and collection system, 382; responsibility for specie reserve, 384
France, monetary experience of, 386
Free banking plan, 101
Frontier psychology, 4

Genoa Conference, 395
Germany, banking in, degree of public control, 365; policies of management, 367; banking concentration, 368; departmentalization, 369; note issue, 375; loan portfolios, 380; clearing and collection system, 382; responsibility for specie reserve, 384
Germany, monetary experience, 388
Gold, preference for, 7; as circulation money, 290; settlement fund, 216
Gold standard, policies relating to, 230; functions of, 230; faults of, 231; future of, 244
Gold stock, origin of huge, U. S., 237; postwar changes in, 240; potential menace of, 240; conservation of, 393
Great Britain, monetary experience, 386
Greenback Party, 317
Greenbacks, origin, 304; legal status, 307, 308; economic justification, 308; cost of, 309; retirement program, 310; men-

ace to gold standard, 311; present status, 313, 314
Group, or chain, banking, 41

Hamilton, Alexander, 136, 217, 286

Independent Treasury, 137, 220
Independent unit banks, huge number, 18; origin, 18; peculiarly American, 19
International banking, reasons for slow development, in United States, 43; Federal Reserve and, 44; branches vs. correspondents, 45; rapid growth (1914–20), 45; Edge Law and, 46; post-war development, 47; foreign loans of U. S., 48
International considerations in monetary and banking policy, 391
International gold clearance fund, 394
International mindedness, 6
International settlements, bank for, 395
Isolation, and financial policy, 5, 396

Joint Commission of Agricultural Inquiry, 340
Joint stock land banks, 328, 329, 332

Keynes, J. M., Managed Currency plan of, 244

Labor banks, 354
Latin Union, 296
Legal restrictions upon lending, 80
Liquidity of loans, 71
Livestock loans, 346
Loans by Reserve Banks, 188
Loan sharks, 350
Loans of commercial banks; policy inherited from England, 71; changes in character of, 71, 92; peculiarities of country banks' loans, 73; elements of a loan and investment program, 75; of branch banks, 77; improvement in methods, 78; reserve position and, 79; legal limits, 80; brokers' loans, 83; proportion eligible for rediscount, 88; on real estate, 89; effect of business mergers upon, 91

McFadden-Pepper Act, 16, 32
Managed currency plan, 244
Medium of exchange, characteristics of adequate, 167
Membership in Federal Reserve System, 159; state banks and, 161; losses in, 163; efforts to recruit, 163, 165
Mergers. See Consolidations and Mergers
Monetary and banking policy, determining factors in, 1; economic and political background, 3; custom as factor in, 8; is there an American policy, 12
Monetary policy, comparison of leading countries, 385
Moral suasion, use of, in enforcing discount policy, 269
Morris plan banks, 352

National and state banks, relative advantages of, 14
National bank notes, origin, 111; inelasticity, 112, 169; present status, 301
National banks, supervision of, 110; origin of, 110; capital stock requirements, 114; interlocking directorates forbidden, 114; liberalization of requirements governing, 115; examination of, 116; services to U. S., 138, 221; defects of, 139
National interrelationships in financial policy, 361
New York, concentration of bank funds in, 139

Note holders, protection of, 123
Note issue, comparison of leading systems, 373

Par remittance, provided by Federal Reserve, 210; controversy over, 212; present status, 215
Pawn brokers, 350
Pittman Act, 300
Populist Party, 318
Portfolios, loan, comparison of leading countries, 378
Postal savings system, 354
Price level, effect of fluctuations in, 232; remedies for changes in, 244
Private banks, 18, 117
Provident loan societies, 351
Proximity, influence upon financial policy, 6

Real estate, loans upon, 89
Receivers of failed banks, 106
Rediscounting, changed attitude toward, 76; proportion of paper eligible for, 88; used to build up reserve, 184
Rediscount rate, effect of changes in, 266
Regional plan of central banking, strength and weakness, 144
Regulation of banking, antecedents of in U. S., 96; peculiarity of problem, 98; by States, 101; absence of, in Europe, 107; by national government, 110; status of private banker, 117; by clearing house, 118; by Federal Reserve, 119; contribution of branch banking to, 120; guaranty of deposits, 124; guaranty of notes, 123; in Canada, 122; present tendencies, 132; failure situation and, 124
Reports of condition, 106
Reserves, function of, 60; reason for legal reserve requirements, 61; requirements under Federal Reserve, 62; secondary, 64
Russell Sage Foundation, division of remedial loans, 351

Second Bank of the U. S., 136, 219
Secondary reserve, 64
Self-liquidating paper, 71
Sherman silver purchase law, 297
Silver, demonetization of, 295
Silver dollar, 294
Special groups, policies relating to, 315
Specie reserve, responsibility for, 383
Speculation, Federal Reserve and, 282
Stabilization, new concept in U. S. banking, 255
State and national banks, relative advantages of, 14
State banks, regulation of, 101; membership in Federal Reserve, 159
State rural credit systems, 333
Stockholders, liability of, 52
Superintendent of banks, 102
Surplus fund, functions of, 54

Time deposits. See Deposits, time
Trade acceptance. See Acceptance, trade
Treasury notes of 1890, 297, 311
Treasury, United States, influence of upon discount policy, 272
Trust functions, growth in exercise of, 92

Uniformity, tendency toward in American banking, 12
United States Commission on rural credit, 323
United States notes. See Greenbacks

World War, effect of on gold stock, 237; discount policy of Federal Reserve and, 271

Date Due

DEC 7 1972

bd

CAT. NO. 23 233 PRINTED IN U.S.A.

HG1601 .D6
Dowrie, George William, 1
American monetary and banking
010101 000
0 1163 0193591 6
TRENT UNIVERSITY

HG1601 .D6
Dowrie, George William
... American monetary and
banking policies

DATE	ISSUED TO

124003

124003